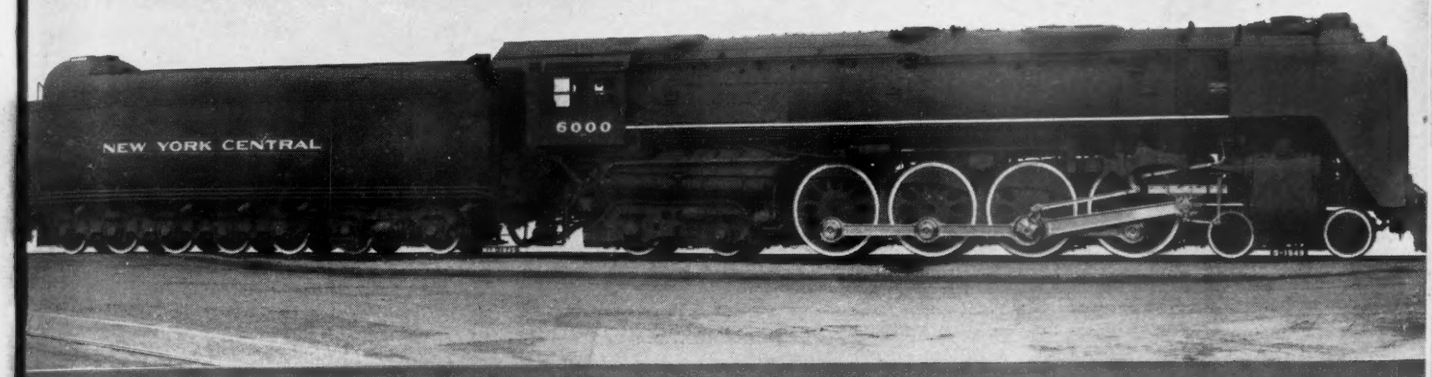
RAILWAY AGE

SEPTEMBER 6, 1947

FOUNDED IN 1856



Steam Locomotives Roll Up

From October 1, 1946, through March 31, 1947, six 4-8-4 Niagara class, coal-fired steam locomotives of the New York Central System, operating between Harmon, N. Y., and Chicago (926 miles) made greater monthly mileages than were ever thought possible for steam engines.

The aggregate mileage of the six locomotives was 786,818 — an average of 22,000 miles per locomotive per month. Individual locomotives, however, made world records of 28,000 miles per month and higher.

This information was contained in a statement made recently by Mr. E. C. Payne, Chairman, steam locomotive performance subcommittee, Bituminous Coal Research, Inc., Pittsburgh, Pa.

It is particularly significant to railroad motive power officials in view of the fact that these six Niagara locomotives and twenty-one others of the same class are equipped with Timken Roller Bearings on all engine truck, driver and trailer truck axles and crank pins and have Timken light-weight reciprocating parts and Timken driving rods. Results, higher performance; lower maintenance; greater availability for service.

TIME FLIES

It seems like only yesterday that we greeted our friends of the Car Department Officers' Association on this very same page.

That was a year ago, and we had about 48,000 carsets of Unit Trucks in service or on order. Since then, more than 25,000 additional carsets were bought by the railroads and private car lines.

In other words, since your last meeting, the number of Unit Trucks sold was in excess of one half of our total sales from 1941 to 1946.

As the 1947 Coordinated Conventions roll around, we again say "Howdy."

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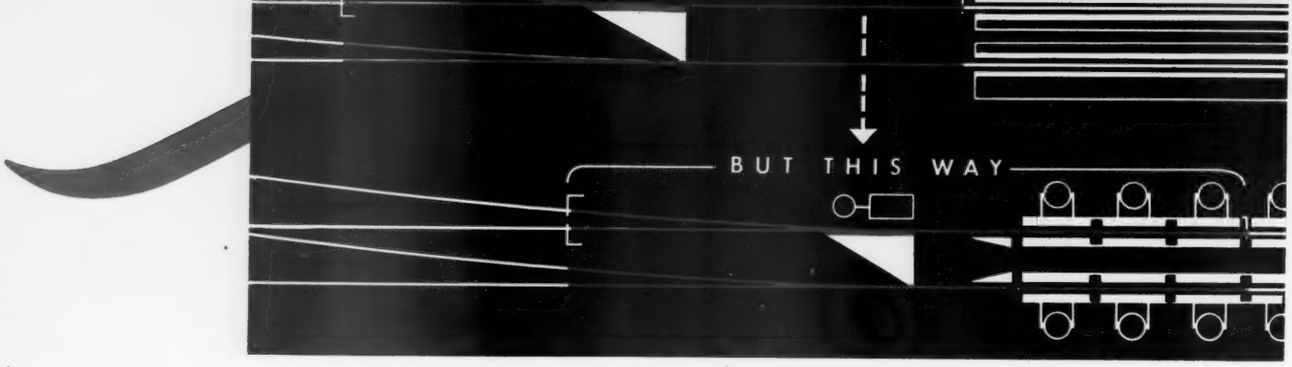

You do *not* need additional yard space ... for DETECTOR CIRCUITS

In car retarder yards, detector track circuits are used to prevent moving power-operated switches under cars. Such circuits customarily extend from a minimum distance of 22 feet in advance of the switch points to approximately 30 feet inside the switch.

No yard space is wasted in obtaining this protection with "Union" Model 31 Retarders. An insulated joint is installed on one rail between the third and fourth retarder cylinders from the leaving end of the retarder. The unit construction of the retarder permits a separation of the brake shoes and brake beams at this point . . . and the air pipe, which is the only metallic connection between the retarder units on one rail and those on the other, is readily insulated . . . making possible the use of a track circuit within the retarder.

Eliminating extra lengths of track between retarders and switch points saves valuable yard space. And shortening the distance between hump and clearance points of the classification tracks—permits longer classification tracks in a given yard area. Another way "Union" Car Retarders save!

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

The Week at a Glance

NON-OPS BAT .775: The arbitration board—over the uncompromising opposition of its railroad members—has granted the non-ops better than three-fourths of what they asked in the way of an increase in hourly wage rates. The brief announcement of this award gave the railroads no clue as to where the board's majority expects them to get the money to meet this 14-plus per cent bigger payroll. If it has any grapevine information about what the commission plans to do about rate increases—or when the commission will do anything—no hint of it has been forthcoming. The board's majority may have thought finding the $438 million a year its award will require is the railroads' worry. It is the railroads' worry; and it is the public's worry, too, because the public will have to pay the bill—either in higher rates or in poorer railroad service. Nevertheless, the "public" members of the board favored the increase.

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HOW MANY NEW CARS?: The current prospect for easing the freight car shortage soon is none too bright, though that picture, presented in our editorial comment on the situation, has little in it that is surprising. The best that can be hoped for, it would appear, is to wind up the year with perhaps 32,000 more cars than it began with.

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STEEL-PLYWOOD REEFERS: Benefitting by the experience accumulated in the intensive use of 25 composite steel and plywood refrigerator cars built in 1940, the St. Louis Refrigerator Car Company has turned out of its shops 50 more cars of similar but improved construction, and more are to be built. Modifications—which are described in some detail in one of our illustrated articles—include the use of additional insulating material all around, the substitution of cement-coated barbed car nails for the screws originally used to attach the plywood, heavier center sills, increased thickness in the end construction, and trucks of a somewhat different type.

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CROSS-CHANNEL RADIO: Some of the time- and labor-saving results of the installation of two-way radio communication between the yardmaster's office and switching locomotives in the Western Maryland's Port Covington terminal at Baltimore are enumerated in an article this week by Division Superintendent J. A. Abbott of that road. A towing launch used in car float operations is similarly equipped. A novel feature of the system is the "cross channel" arrangement, with one channel for calls from the yardmaster's office only and the other for calls from the mobile units. The purpose of this arrangement is the prevention of unessential conversation between crews on locomotives.

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NATIONALIZATION: An article herein reports the formation of the commission to which the British Labor party has turned over the awesome task of nationalizing that country's railroads—along with its canals, the London subways, the intercity truckers, the privately owned freight cars, and, when they get around to it, the bus lines, too. How this is to be done, particularly in the face of the very serious general economic crisis that nation is up against, is not very clear, and the failure of government spokesmen to give any light on the matter in the Parliamentary debate on the bill has not relieved the doubts of those who are not blinded by the emotional intoxication which total immersion in socialistic doctrine appears to induce.

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DOUBLE TALK: Those who undertake to speak for business, that is, for shippers, are practically unanimous in *saying* they oppose government ownership. Their *actions*, on the other hand, indicate that they really are not opposed to government ownership of property used in water transportation, or in air transportation, or in highway transportation; they are opposed only to government ownership of the railroads. If the railroads are allowed by the Interstate Commerce Commission, in its own good time, to increase their rates sufficiently to produce earnings that even approach the legally established level of reasonableness, these shippers who say they oppose government ownership threaten to divert from the privately owned railroads to the competing forms of transportation—those that use government-owned facilities—the products of their industry (at least, those they thus can ship "cheaper"). If this should come about, a considerable expansion would be required of the government-owned property devoted to transportation. Shippers who advocate, or accept, or do not vigorously oppose, such an expenditure of tax money are favoring more government ownership, even though they say they are opposed to it. Our leading editorial turns the light of logic on this brand of reasoning.

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FUTURE FORESTERS: The Seaboard Air Line has demonstrated that more tonnage of forest products—and every reason to expect sustained yields in profitable and growing volume—will follow the application of practical forestry techniques in woodlands along its lines. One of our illustrated articles outlines briefly what that road has done to promote such practices, and the methods that are being employed to develop the interest of farm boys in their application.

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BRIEFLY NOTED: Winners of this year's Harriman award medals—to be presented September 17—are the Union Pacific, the Western Maryland, and the Colorado & Wyoming. . . . The state of Washington isn't satisfied with class rate "equality"; it wants its territory cut in on reductions ordered for the South and Great Plains areas. . . . The N. I. T. League doesn't think express rates ought to be increased permanently until a new uniform national scale is worked up. . . . Freight car and locomotive orders reported in these pages in August add up to over $53 million.

RADIANT HEATING: Though there are a great many railroad stations that show considerable advances, in the arrangements provided for comfortable heating, since the days when the pot-bellied stove was more or less fondly regarded as the most essential article of furniture in the "depot," there are still further developments in the art and science of space heating that engineers and architects now will want to consider as plans are made to modernize or replace stations and other railroad buildings. An article in this issue (page 54) gives full particulars about the planning of radiant heat installations for such purposes, using a hypothetical station plan as an example. The advantages of this relatively new type of heating, particularly in the way of eliminating floor obstructions and realizing fuel economies, are set forth along with a practical explanation of the way radiant heating works and how it differs from more conventional designs.

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WHOSE GRAIN IS IT?: The annual effluvia of complaints from the grain trade about the freight car scarcity will not be missing this year, it appears. Although the chief southwestern wheat carriers loaded 40 per cent more cars of that grain in June and July this year than last, and heavy loadings are currently being reported by their northern neighbors, it still is true that it hasn't always been possible to supply every shipper every car he asked for at the moment he asked for it. This condition is partly a result of a shortage of cars—that can be corrected only by building more cars—and it is partly a result, as one of our editorials observes, of the new pepped-up harvest methods that turn out a whole state's crop all at once. These methods are employed because they are to the growers' advantage. Like most improvements, there are additional costs to be considered, particularly the cost of storing the grain. The grain trade has not achieved any very conspicuous success in recent years in enlarging its provisions for storage. Instead it appears to prefer to expend its energy (and save its money) in abusing the railroads because they have not spent their money to provide the means to load all this wheat at once.

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A LIGHT DAWNS: For years it has been the Interstate Commerce Commission's policy not to let on it knows anything about what happens to railroads after it has put them through the wringer and turned the resulting reorganization plans over to the courts. That policy has been under severe fire, in Congress and elsewhere, because there are a number of people who refuse to give up the idea that a railroad's earning power bears some relation to the amount of money it makes, even if the commission, after due deliberation, has announced a different conclusion. One of this issue's news articles, summarizing the commission's comments to the court on the Missouri Pacific proceedings, and its suggestion that the plan be returned to the commission for revision, affords a ray of hope that a change in policy may be developing.

RAILWAY AGE

What Do Shippers Really Want?

Railway Age has been for many years observing at close range and discussing the relations between the shippers and the railways and the ways in which these relations have been affected by government policy. Their relations are better than in 1907, when really effective government regulation of railways began, or than in 1917, or perhaps even than in 1927 or 1937.

But, although this paper has so long had close contact with shippers and their organizations, as well as with railways, we have never known what the shippers have really wanted done about transportation, and do not know now.

Whose Prices Have Doubled?

Getting down to fundamentals, all shippers say they are "opposed to government ownership." It would be natural to expect that if they were really opposed to government ownership they would themselves adopt policies and favor government policies calculated to prevent government ownership. But do they? Many of them promote the development of waterways, highways and airports for the commercial transportation of freight. The government owns and develops the waterways, highways and airports. Are the shippers, then, really opposed to government ownership—or only to government ownership of railways? Government ownership is government ownership whether it is ownership of railways or other means of transportation.

The shippers produce the country's commodities and thereby provide its freight traffic. Since 1939 they have raised the wholesale prices of their commodities an average of more than 100 per cent. The average revenue per ton-mile that they pay the railways for transporting their commodities has increased meantime only 11.5 per cent. The railways are now seeking another advance in freight rates which would make their average revenue per ton-mile about 34 per cent higher than in 1939. And spokesmen of the shippers are giving solemn warning that "the railways may price themselves out of their market."

Do shippers think they have "priced themselves out of their markets" by raising their prices more than 100 per cent? Evidently not. Statistics of business show they are still producing more than ever before in peacetime; and many of them are still so confident of their markets that they are still raising their prices. What, then, would happen to the record peacetime traffic that the railways are handling if the railways "priced themselves out of their market"? Would shippers quit producing it? Doubtless what they mean is that they would divert it to the *government-owned* highways, waterways and airports and thereby create a demand for expansion (by expenditure of the taxpayers' money) of these *government-owned* means of transportation.

If commercial carriers by inland waterways, highways and air were deprived of the privilege of using government-owned property largely or entirely at the cost of the taxpayers, they would not only be unable to take over much of the freight now being handled by the railways, but many or most of them would have to quit business. If shippers favor the increase in expenditures of the taxpayers' money which would be necessary to enable other carriers to handle a larger part of the freight, they are plainly not opposed to government ownership, but *merely to government ownership of railways.* By what logic do they oppose government ownership of part of the nation's transportation system and promote expansion of government ownership of the rest of it?

Who Started These Wage Increases?

Spokesmen of the shippers appeared in the hearings before the arbitration board created to settle the recent railway labor dispute and gave warning that the shippers would object to paying higher rates to defray another increase in railway wages. They implied that the railways yield too readily to demands for advances in wages. But what were these shippers doing when the present round of wage increases was started? They were *voluntarily starting it.* The railways have not since the war *voluntarily* made any advances in wages. Excepting 2½ cents an hour forced upon them by the government last May, the advances they have made have been ordered by arbitration boards created under the Railway Labor Act, the awards of which the railways had to accept.

Ever since shippers *voluntarily* started the current round of advances in wages, they have been making raises in prices, many of the most important of which the railways have to pay, and trying to justify their

raises in prices by the advances in wages they have made. The shippers say that after they advanced wages they had to raise prices to get adequate profits. With what consistency or honesty can they thus justify their advances in prices, and then oppose advances in railway rates to pay advances in railway wages? First, shippers have raised the prices of their commodities relatively almost *ten* times as much as the increase in railway revenue per ton-mile since 1939. Second, the railways, although handling 50 per cent more traffic, are earning 35 per cent less net operating income than in 1929 and are making relatively less profits than any other large industry. Third, it is only fair to the economic intelligence of shippers to assume they know that the railways must earn larger profits which can be derived only from higher rates if they are to be able adequately to improve and expand their properties under private ownership.

The shippers, in their own selfish interest, ought to decide what they really want and quit stating it, or allowing their spokesmen to state it, in so much double talk. If they "don't want government ownership of railways," they can easily prevent it. But they are plainly promoting it when they favor policies which (1) promote expansion of means of transportation owned by government and (2) prevent the railways from effecting adequate improvements and expansion under private ownership.

Most shippers say not only that they are opposed to government ownership, but that rates are less important than service, and that what they want is good service. They never were presented with a better or more important opportunity to show they mean what they say than now. Nothing so effectively prevents the human mind from working as *shortsighted* selfishness. And only shortsighted selfishness can cause shippers who have raised their own prices so much to think they are thinking if they decide they have had any good reason for raising their prices that does not equally justify advances in railway rates.

Higher A. R. E. A. Dues, or—

Members of the American Railway Engineering Association now have before them, in the form of a letter ballot authorized by the board of direction, a proposal for increasing the membership dues. If adopted, the proposal will result in the dues for members and associates being raised from $10 to $15, and for juniors from $5 to $7.50. However, coincident changes planned in the charges for the bindings of the annual proceedings will result in a net increase in the dues of only $4 for those members who have been in the habit of specifying the cloth or half-morocco bindings.

In making up their minds how to vote on this proposal the members of the association will want to consider several facts, and to weigh them carefully. Obviously, most of them will want to know, first, if the increases are necessary. The answer to this question is set forth clearly in a letter from President A. Chinn accompanying the letter ballot, which estimates that the deficits for this year and next will amount to $8,000 and $9,000, respectively. This lack of balance prevails even though the association is the beneficiary of a substantial contribution from the Association of American Railroads, which has increased 45 per cent in the past seven years. In fact, each member is now contributing toward the support of the association less than one-half his pro-rata share of the cost of doing business.

With the fact established that its income is substantially less than the outgo, the association is faced with the alternatives of cutting expenses or seeking more revenue. Since reduction in costs can be accomplished only at the expense of reducing the service rendered to members, the question becomes one of deciding how valuable the work of the association is to its members and to their employers, the railroads.

Anyone familiar with the splendid work done by or under the auspices of the association over the years could not hesitate an instant in making up his mind on this question. Beyond doubt, the A.R.E.A. is one of the most powerful single forces working today in behalf of improved standards of design and maintenance for railroad tracks and structures. A strong A.R.E.A., functioning at least at its present level of efficiency, is an effective form of insurance against any possibility that the properties may lag behind requirements.

The responsibility for keeping the A.R.E.A. functioning effectively is a joint one, shared by its members and by railroad managements. It is not a question of altruism but of pure self-interest. If the organization had to curtail its activities through lack of funds the result would be harmful alike to the members and to the railroad industry.

Why Should Grain Be Moved All at Once?

Railroad companies are held to be different from other businesses not in the "public utility" category in that their obligations to the public—without particular reward therefor—go far beyond the duties demanded of commerce and industry generally. This prevailing attitude is understandable and is supportable if not pushed to extremes. From time to time, however, there arises public pressure for special service by the roads outside all bounds of the "public utility" concept of their duties. This is certainly true of the demands that have been made on the wheat-carrying roads during the past few months by the agricultural interests and their political representatives.

A congressman from a big wheat-producing district called a representative of the Car Service Division of the Association of American Railroads recently and asked him, for the sake of all things holy and political, to get more box cars into the area, or at least make him some promises, "so I can get my constituency off my neck!" After some preliminary conversation, the A.A.R. man asked the congressman if, in view of the constantly increasing annual crop in that region for the past seven years and the growing concentration of the harvest—due to the spread of the combine—the grain

dealers or producers had increased their storage capacity commensurately.

The talk came to an end at once. There was nothing more to say. The fact is that almost nowhere in the wheat-producing areas has there been any appreciable increase in storage capacity. In short, the producers sow bigger crops; concentrate the harvest into a few short weeks; and obtain record payments for their produce; but balk at making provision for the increased storage which is necessary to "get the wheat off the ground." At the same time, the grain trade, through its associations and political representatives, loudly and self-righteously demands that the hard-pressed railroads denude the rest of the country of box cars and concentrate them in the harvest areas so that the grain may be placed under cover at once.

Thus, at a time of record loadings of many commodities in all parts of the country, the railroads are expected to take over the entire job of compensating—with scarce cars—for loss of the longer harvest period of yesterday, for which the farmers have substituted to their own profit the short, intensive harvest.

Is it the railroads' job to take up the slack? A concentrated harvest adds nothing to their revenues. The "feast or famine" trend of grain offerings multiplies their operating problems many times over. In a system of genuine private initiative, the costs of an innovation are perforce assumed by the innovators as a price they are willing to pay for the expected benefits. In the present instance, however, the grain producers apparently expect to garner to themselves all the advantages of a quick harvest, while exerting political pressure to shift the cost of the innovation to the railroads.

Despite the greater shortage of cars this year than last and a higher level of carloadings generally, the railroads have exceeded all expectations in their handling of the flood of wheat. The eight principal southwestern grain roads reported more than 40 per cent more grain loadings during June and July this year than in the same two months of 1946—a remarkable improvement. But the point is: Should the public be led to expect the railroads every season to handle all of the grain offered "right away, sir," in the face of a shorter harvest each year and—thus far—a larger crop. Have not the producers and dealers themselves some responsibility to provide the storage facilities made necessary by their changed method of doing business?

Freight-Car Progress?

In a discussion of the shortage of steel for use in the production of freight cars as of the end of the first quarter of 1947 it was stated that the increased tonnages promised by the steel industry to build up the output of freight cars to a quota of 10,000 a month would become available "to the greatest extent possible for June rollings" and that the program would not be placed in full effect until the July rollings. It was also evident that a "lead time" of two months between production of the steel and construction of the cars must be allowed. Thus, June rollings would be available for the new freight cars built in August and July rollings for the new cars built in September. And because the builders' shipping schedules at that time indicated a decline after October from the 10,000-car level, steel for that quota would be furnished only through the August rollings.

On the basis of these facts, two estimates of the probable output of new freight cars during the year, one considered optimistic and the other more realistic, were made in these columns. The more optimistic estimate assumed an output for the four months from April to July of 20,000 cars, for August to October, inclusive, 30,000 cars, and, for the last two months of the year, 14,000 cars. Adding the output of approximately 8,100 for the first quarter, this gave a total output for the year of 72,000 cars.

In the light of developments since the end of the first quarter, what revisions should be made in these estimates? Production for the four months from April to July, inclusive, totaled 19,458 freight cars, which is less than 600 cars short of the 20,000 estimate for that period. However, the output since the first quarter, while it has improved, was still below 6,000 cars in July and offers little reason to expect the attainment of more than the early quota of 7,000 cars per month in August. The probable production for August to October, inclusive, may, therefore, be expected to fall short of our earlier estimate by at least 3,000 cars, and the output of new cars for the year—of carbuilders and railroad shops combined—will scarcely reach 70,000.

In the meantime, the numbers of railway-owned box cars, of open-top cars, and of total freight cars have declined since the first of the year. As of the end of July there were approximately 3,000 fewer box cars, 3,800 fewer gondolas and hopper cars, and 7,300 fewer freight cars of all types than on January 1. So far, the number of cars destroyed or dismantled has averaged about 3,150 monthly during the current year, a rate which will total nearly 38,000 cars during the 12 months. If not more than 70,000 new freight cars are built within the 12 months, we may finish the year with some 32,000 more cars than were available at the beginning of the year. This will bring us up to the fall peak with not over 20,000 or 21,000 more cars available than were owned by the railroads at the beginning of the year—perhaps 15,000 more than were available during the fall peak of 1946.

Carloadings are now running heavier than they did in 1946 and will apparently continue to do so during the fall months. The brightest spot in the picture is the extent to which shippers are cooperating with the railroads under the leadership of the Car Service Division, which has effected an appreciable improvement in the efficiency of freight-car utilization.

Deliveries and Orders for Freight Cars—Carbuilders' and Railroad Shops

	No. of cars owned or leased on first of month	Deliveries	Orders	Backlog of orders on first of month
January	1,740,022	2,982	9,905	
February	1,739,608	2,293	13,729	75,578
March	1,738,265	2,883	12,049	86,031
April	1,735,793	4,123	8,861	94,947
May	1,735,662	3,929	7,390	99,346
June	1,734,338	5,527	13,084	101,980
July	1,733,824	5,879	14,865	109,006
August	1,732,278	**	**	117,592

** Figures not yet available.

St. Louis Refrigerator Car Company Gets Fifty New 40-Ton Cars

New units embody numerous improvements in detail design over similar composite steel-plywood cars built in 1940

THE St. Louis Refrigerator Car Company placed in service early this year 50 new 40-ton refrigerator cars, constructed at its own shops in St. Louis, Mo., and greatly similar to a series of 25 composite steel-plywood cars, built in the same shops seven years ago and described in the August 24, 1940, *Railway Age*. These cars embody many refinements in design as a result of service experience with the earlier series of cars which, however, were so successful in general performance that the company plans to build 100 additional cars beginning about October 1.

The cars are built essentially of copper-bearing steel underframe and superstructure frame parts, supplied by the Mt. Vernon Car Manufacturing Company, Mt. Vernon, Ill. Douglas fir plywood, of various grades to meet specific requirements, used for the side-wall, roof, floor construction and inside lining, was furnished by the Harbor Plywood Corporation, Hoquiam, Wash.

A feature of the 1940 refrigerator car design was the use of dead-air space for insulation in all parts of the cars. On the last lot of cars, the dead-air-space principle of insulation was used, but Naturzone board-form insulation was also applied in the sides, ends, roofs and floors and Haircraft blanket-form insulation in the floors.

The principle advantage in using this additional insulation is that the large dead-air spaces are now broken up into smaller and more efficient dead-air spaces, which supplement the insulating value secured from the insulation material itself.

The light weight of the 1940 design refrigerator car was 54,100 lb.—an average saving of 6,000 lb. per car over conventional tongue-and-groove wood being credited to the plywood construction. On the fifty 1947 cars, the light weight averaged 54,852 lb., this slightly increased weight being due to addition of the insulation previously mentioned, increasing the thickness of the plywood in the floor and outside sheathing, and increasing the weight of center sills, all of which changes were made to realize a longer life of the particular parts involved.

In the 1940 cars, screws were extensively used to secure the plywood in place. Experience of the St. Louis Refrigerator Car Company indicates that screws do not serve the purpose as well as cement-coated barbed car nails, especially as the screws break off, causing the plywood to become loose.

Trucks, Draft Rigging, Brakes

The 1940 cars were equipped with 80,000-lb. capacity, spring-plankless, National Type-B trucks, with 5-in. by 9-in. journals, one-wear wrought-steel wheels, drop-forged journal wedges, Type-E double-coil truck springs with one Cardwell Type P-8-1 friction spring per frame, and Barber adjustable roller side bearings. Cars completed in 1947 are equipped with the A.S.F. A-3 Ride-Control truck, with 5-in. by 9-in. journals and one-wear wrought-steel wheels, drop-forged journal wedges, and 16 double-coil and 4 single-coil 5½-in.

by 10⅞6-in. springs with 3¾ in. travel. This truck does not require the use of any friction springs, the snubber unit being built in. The Barber adjustable roller side bearing is still used.

Cars built in 1940 were equipped with Cardwell type L-25-SA draft gear with Universal cast-steel vertical-type yokes, 6-in. by 1½-in. yoke keys, secured with A.A.R. retainers, and Type-E 6¼-in. by 8-in. rigid-shank, bottom-operating couplers with A.A.R. bottom-lift-type release rigging. The only change in the 1947 cars in this respect is that Cardwell M-25 draft gears are used.

The 1940 cars were equipped with Westinghouse AB-10 freight-car brakes and Universal Type XL hand brakes, with extra-heavy pipe and pipe fittings throughout. There is no change in brake equipment on the 1947 cars with the exception that Universal No. 2109-A brake adjusters are added.

Steel Frame Construction

The steel frame construction is the same as was described in the earlier *Railway Age* article, with the following exceptions: The center sill has been increased from 36.21 lb. per ft. to 41.2 lb. per ft. End braces have been changed from 5-in. by ¼-in. plate to ¼-in. pressed steel, being formed the same as other posts and braces. They are now secured to the steel end and steel transom post by 5-in. by 5⁄16-in. plates, these plates being riveted to the steel end, the end braces and the transom posts. These changes in the center sill and end braces were made to secure more strength in these parts of the cars, which is required because of the heavy and bulky ladings carried.

The only change in the car body framing is the substitution of 5-in. by 5½-in. fir corner posts, which are now applied in sections, whereas in the cars built in 1940, 5-in. by 5½-in. oak corner posts were applied in one piece. This permits removing a section of the corner post to straighten the steel corner post, when cars are damaged, whereas it was formerly necessary to remove the entire post.

Double fir belt rails 4¼-in. by 4¾-in. in the 1940 car are supplemented by an additional fir belt rail of the same size which is applied between the lower belt rail and the side sill, at approximately the floor level. This facilitates more efficient attachment of the plywood inside lining and plywood outside sheathing at the floor level of the car.

The floor construction is substantially the same in both cars with the exception of an added course of 90-lb. Mulehide insulation paper over the lower course of 5⁄16-in. plywood between the sills in the 1947 design, also a course of ½-in. quilted Haircraft insulation over the top course of 5⁄16-in. plywood insulation between the sills, and a course of 1-in. Naturzone and 90-lb. Mulehide insulation paper over the subfloor. The Haircraft blanket-form insulation and Naturzone board-form insulation were furnished by Wilson & Co.

General Dimensions of 50 S. L. R. X. 40-Ton Plywood Refrigerator Cars Built in 1947

Nominal capacity, lb.	80,000
Load limit, lb.	81,200
Light weight, lb.	54,800
Cubic capacity, cu. ft.	2,395
Inside length, ft.-in.	40-0
Inside width, ft.-in.	8-2
Inside height, ft.-in.	7-4
Extreme width, ft.-in.	10-2
Height at extreme width, ft.-in.	12-1
Height to top of running board, ft.-in.	13-4
Height top of roof grab iron, ft.-in.	13-6
Height to door opening, ft.-in.	4-5
Door width, ft.-in.	4-0
Door height, ft.-in.	6-0
Length over running board, ft.-in.	42-8
Length over corner posts, ft.-in.	41-0
Length over strikers, ft.-in.	42-0
Length over couplers, ft.-in.	45-0

The plywood drain floor is changed from 9⁄16-in. to 5⁄8-in. and the spline joint is replaced by a butt joint, which a coat of Milar's No Krode lap-and-joint sealer makes watertight.

Side wall construction is the same as on the cars built in 1940, with the exception of an added course of 90-lb. Mulehide insulation paper just beneath the inside lining. A course of 1-in. Naturzone is also applied in the center of the space between the inside and outside plywood insulation. In this manner, the 3-in. dead-air space in the cars built in 1940 is changed to two 1-in. dead-air spaces and a course of 1-in. Naturzone.

On the outer face of the outside course of 5⁄16-in. plywood insulation, a course of 15-lb. insulation paper is applied and just beneath the outside sheathing is a course of 90-lb. Mulehide insulation paper. The outside sheathing has been increased from ½ in. to 9⁄16 in. in thickness.

The end construction has also been changed by applying 1¾-in. by 5¼-in. tongue-and-groove end lining in place of the ¾-in. plywood end lining used in the cars built in 1940. This change was made in order to have at least this thickness of lumber in the end lining to withstand extreme lading pressure. Plywood 1¾ in. thick could be used, but the added cost would hardly be justified.

Just beneath the end lining is a course of 90-lb. Mulehide insulation paper. The spacing of two courses of 5⁄16-in. plywood insulation has also been changed and a course of 1-in. Naturzone added between the end lining and the first course of 5⁄16-in. plywood insulation, this change being made for added insulation efficiency.

In order to improve still further the insulating efficiency of the cars, spaces in the U-section of the pressed steel posts and braces have been filled with

(Continued on page 64)

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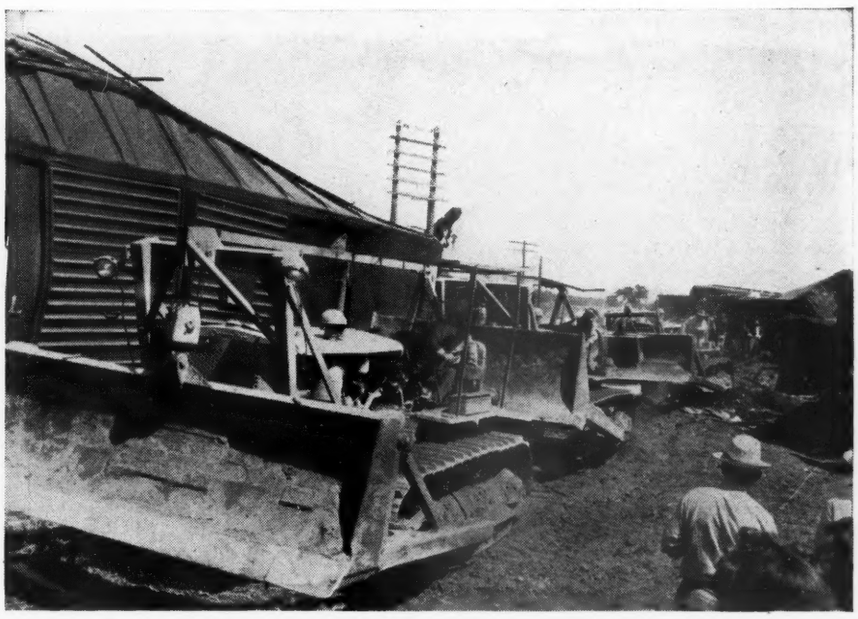


Caterpillar tractors expedite wreckage removal

When 21 cars of a 95-car freight train of a western railroad were derailed recently, the work of clearing the track and right of way was speeded by the use of a fleet of Caterpillar tractors with bulldozers. The wreck occurred at a grade crossing when a truck driver, blinded by the sun, drove his vehicle onto the track in the path of the train. Derailed by the impact, the locomotive plowed up more than 100 yd. of track and then turned over on its side, followed by the 21 cars which were jammed together over a distance of 450 ft. To help in clearing the wreckage the railroad obtained five D8 Caterpillar tractors from local contractors and ranchers and put them to work removing debris, uprighting cars and rebuilding the roadbed. An officer of the railroad estimated that the use of the tractors made it possible to clear the track in one-third the time that otherwise would have been required. The view above shows three of the tractors in operation.

By

ROBERT N. HOSKINS

Industrial Forester, Seaboard Air Line

This growth of Florida pine (left) was produced in 17 years under foresters' supervision. Foresters instruct boys (below), who are attending a Forestry Training Camp, in artificial planting practices

How S. A. L. Promotes Its Area's Timber

Encourages conservation to continue supply of product which is basic to healthy economic life in the Southeast

FORESTS of the Southeast played a leading role in the early history of our country and were responsible more than any other resource for the construction of that section's railroads and other industrial development. Tonnage for the early railroads in the region depended on virgin forests. As these virgin forests were cut down, attention had to be focused on second-growth timber. The earlier lumbering practice of moving to other areas when one section was cut over had to be changed, if these lumbermen were to continue in operation, since the large tracts of virgin timber had vanished.

The employment of foresters by railroads is not new. A number of them have been employed to handle the purchase of forest products and to manage company-owned tracts of timberland. In 1937 the Seaboard employed a forester to work with industry—landowners large and small—and initiated a widespread forestry program for the purpose of perpetuating the timber in the areas it serves, not only for the present wood-using industries but also for other prospective industries.

This railroad's entry into this type of activity had tonnage as its objective. Forest products have always been important tonnage, resulting in considerable revenue. The accompanying table illustrates the importance of this product for the past ten years and the percentage of carloads of forest products to total carload shipments over a total mileage of 38,741 for the South's railroads.

With the employment in 1937 of A. E. Wackerman, now professor of forest utilization at Duke University, as industrial forester, the Seaboard set out on its initial program throughout the Southeast. Considerable contact work was necessary in this new function—with the varied wood-using industries throughout the entire system. Seeing the need for better cutting practices, Mr. Wackerman devoted much time to cutting demonstrations on company-owned land of existing industries and on privately-owned land. Many of these demonstrations set up in the Southeast were directly attributed to this forest. Emphasis, at all meetings, was placed on the need for statewide fire protection.

In 1938 Charles A. Gillette joined the railroad's industrial department as industrial forester, succeeding Mr. Wackerman, and immediately launched an intensive drive in cooperation with state, federal and other agencies in carrying out countywide educational campaigns against the forests' greatest enemy—fire. Such media as exhibits, news stories, motion pictures, essays and other contests were used to promote popular understanding of the need for fire protection at all times. To emphasize further the desirability of fire protection and better cutting practices, which improve the overall economy in the Southeast, this railroad operated in 1941 an "All Forestry Demonstration Train," making 50 scheduled stops from Virginia to Florida. Appropriate exhibits were constructed and were viewed by representatives of industry, govern-

ment, education, farmers and timberland owners.

The industrial department has for a number of years been concerned with the problem of aiding the small landowner. Varied programs had been experimented with for some time. In 1945, with the cooperation of the general industrial agent of the Seaboard, a program was set up to recognize achievement on the individual farm boy's property in each of the six southeastern states, viz., Virginia, North Carolina, South Carolina, Georgia, Alabama and Florida.

Results Gratifying

A survey was made by the State Department of Vocational Education in Virginia to determine the effectiveness of this program. There are approximately 215 vocational agriculture teachers in the state. As direct evidence of the cooperative program which encouraged farm boys who had woodlots to begin protecting timber, marking it selectively, and planting areas that were badly eroded and other lands where no natural reproduction was forthcoming, it was found that by March, 1946, some 189 boys were carrying on forestry as an enterprise on their home properties. A year previously would have shown about 20 boys carrying on similar work. These forestry enterprises covered some 541 acres, and 813 boys were found to be carrying on forestry as a supplementary farm job on their respective home farms, representing about 3,882 acres of land. Teachers were given instruction in forestry in the summer of 1945, which also placed greater emphasis on the program during the fall of that year. Some 147 departments of vocational agriculture were organized to assist the Virginia Forest Service personnel in forest fire fighting. Each of these groups contributed their part toward reducing forest fires throughout the state —not only in number but in acreage burned, which amounted to about 0.22 per cent of all forest lands in the state.

Revenue Freight Loaded—Southern District—1935 to 1945 Inclusive

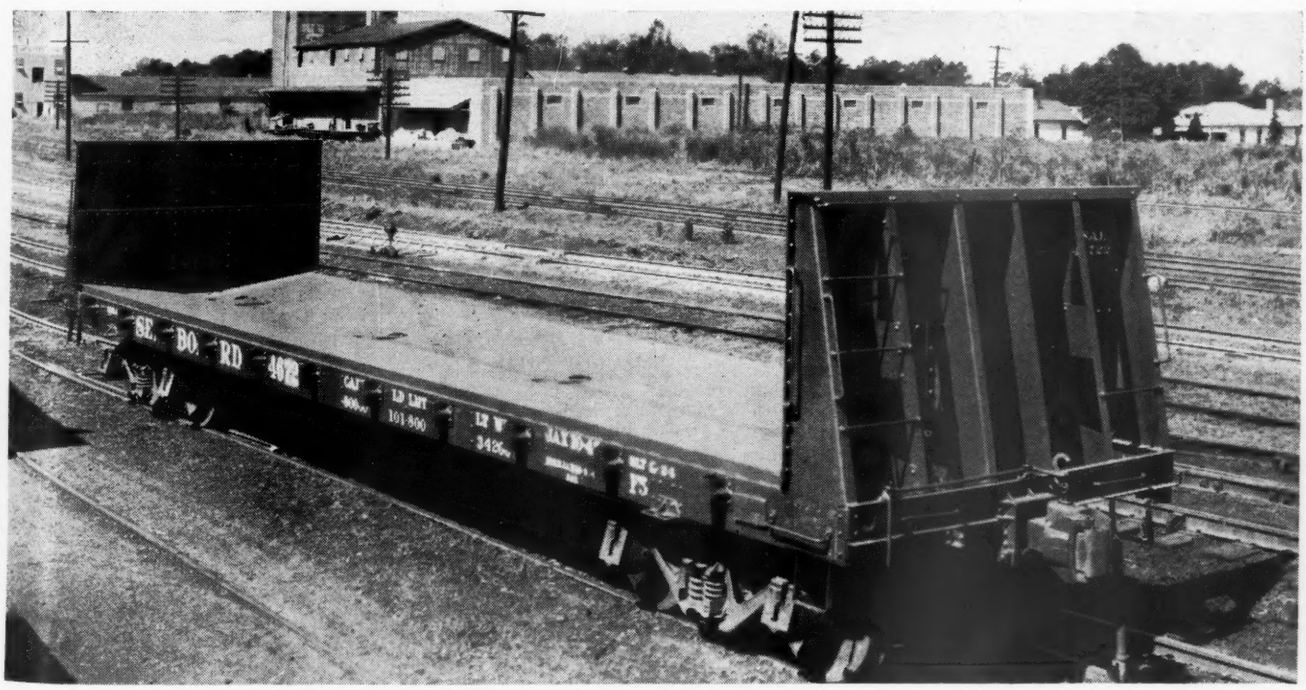
Year	Total Carload Shipments	Forest Products	Percentage forest products of carload shipments
1935	3,175,274	401,222	12.5
1936	3,704,914	487,422	13.2
1937	3,921,709	571,224	14.6
1938	3,338,444	451,862	13.5
1939	3,611,897	507,814	14.6
1940	3,892,790	569,917	14.6
1941	4,739,379	726,564	15.3
1942	5,448,409	827,208	15.2
1943	5,340,606	746,957	14.0
1944	6,323,929	741,716	11.7
1945	6,307,910	720,094	11.4

Other groups showing keen interest, particularly in Virginia, in the students enrolled in vocational agriculture and who have backed them wholeheartedly include the Albemarle Paper Manufacturing Company of Richmond, Camp Manufacturing Company of Franklin, Hummel Ross Fibre Corporation of Hopewell, American Turpentine Farmers Association Cooperative, and the Virginia Forest Service. Each agency has cooperated in an effort to encourage the youth to show interest in the timber crop. Continued results will, no doubt, be forthcoming as more and more teachers seek additional information which will enable them to do a better job of teaching forestry to their expanding classes in vocational agriculture.

To contribute their part to this progressive movement, the railroads, particularly those in the South, have employed foresters to aid present industries and secure increased tonnage. While their industrial departments have been active in compiling information and necessary data for new industries seeking locations in the southern area, where approximately two out of every three acres are ideally suited for timber, they have not overlooked the opportunity of cooperating with various state agencies and private landowners and taking steps along their respective lines to reduce fires originating from their respective rights-of-way. Such moves can and will reduce damage claims from railroad-caused fires.

Many Benefits

By serving as a coordinating agency in those states covered by their respective lines, and continually cooperating with all forestry agencies—state, federal and private—not only will tonnage be developed from present and new industries but the railroads' own needs for wood products will be fulfilled as forest fires are reduced and forest management becomes more of a reality. Such productive forest lands mean greater payrolls to the whole area, and more permanency, since continuing crops will be harvested from these same lands, thus resulting in a more stable economy.



A modern wood rack car

Radiant Heating and Its Application to a Passenger Station

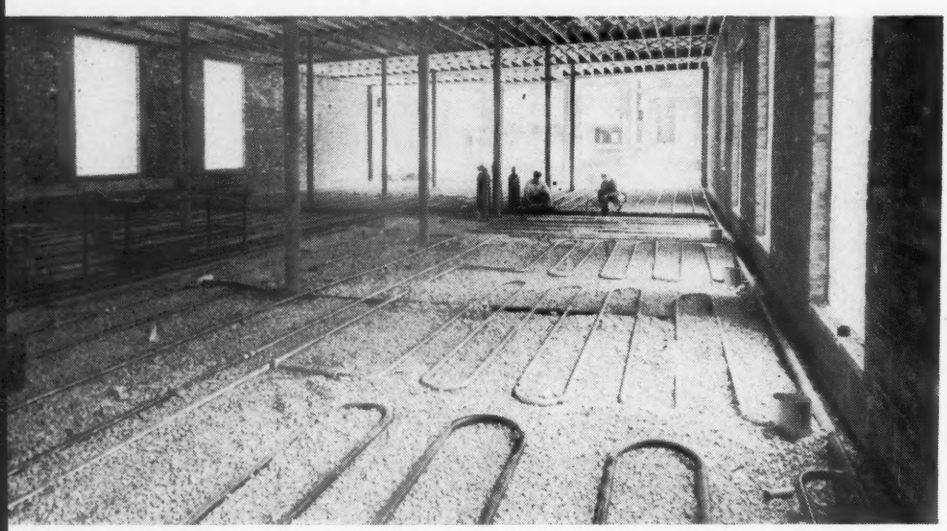
A discussion of this system and its advantages, and a detailed explanation of the method and calculations involved in working out a practical problem in design

By PAUL S. PARK
Engineering Service Department,
A. M. Byers Company,
Pittsburgh, Pa.

PROPER heating is an important consideration in the large programs of building construction and modernization planned or under way on the railroads, embracing passenger stations, freighthouses, offices, enginehouses, etc. The main reason for heating any building, regardless of its size or character, is to establish comfort for those who may be in the structure. To this end, scientists and engineers have been continuously searching for ways and means of establishing the highest degree of indoor comfort in the most economical manner.

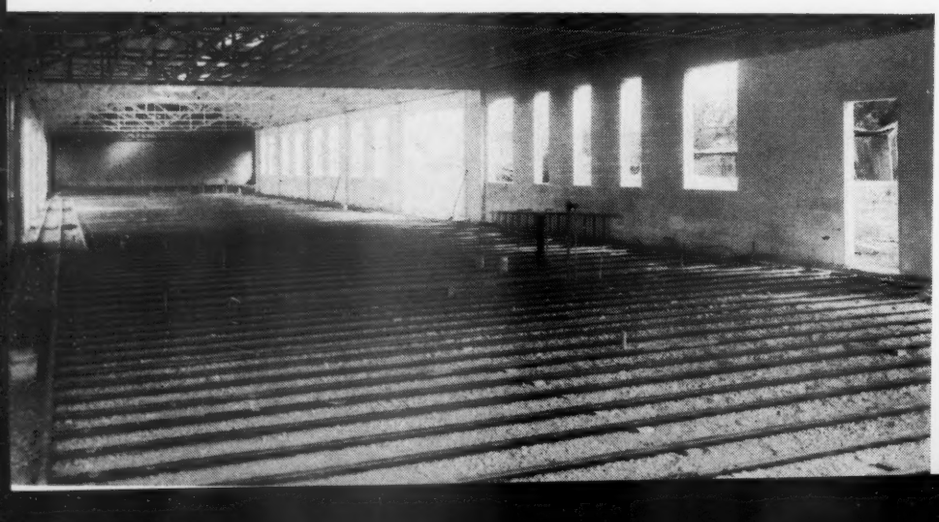
One of the latest developments in space heating is "radiant heating"—a system that eliminates radiators and all other exposed devices and operates on a principle entirely different from other systems. In this system, railway construction and maintenance officers concerned with the heating of any building connected with the industry—from passenger station to shop—may find the answer to the ever-present problem of establishing and maintaining maximum comfort for customers and employees, while at the same time availing themselves of certain specific advantages in the system.

Such a system already has been installed in one passenger station — the Chesapeake & Ohio's new "vest pocket" model station at Prince, W. Va. Also, radiant heating is now being built into a new Diesel-locomotive repair shop at Harrisburg, Pa. A similar method is being discussed for use in passenger coaches.



Installation view of a radiant heating system with sinuous coils. By extending the supply lines around the exterior walls the benefit is obtained of having the hottest water at locations where the greatest heat losses occur

This view of a radiant-heating system with a grid arrangement was taken just before the concrete floor was placed



The System Explained

The principle involved in radiant heating is predicated on the scientific fact that sufficient heat is generated within the human body to maintain comfort at low temperatures. But this self-generated heat is lost in three ways—by radiation to cool surfaces, by the passage of cold air over the skin and clothing, and by the evaporation of body moisture. Of these, radiation losses account for the largest percentage. The objective of radiant heating, therefore, is to warm cool surfaces by means of concealed hot-water pipe lines for the purpose of regulating heat losses due to radiation. Air sweeping the warmed surfaces in the room also becomes warm, thereby controlling convection and evaporation losses. Because the greatest cause of discomfort—radiation losses—is controlled, air temperatures can be 5 to 10 deg. lower than in conventionally heated buildings. This results in a fresher, more invigorating atmosphere that is free from "stuffiness."

There are other advantages, too. Drafts are eliminated because strong air currents are not needed to carry heat around the room. Fixtures and

room surfaces remain cleaner. Architectural designs based upon a more liberal use of glass can be employed. Radiant-heated floors "block" down drafts which, in buildings heated by ordinary means, result in excessive heat losses as they sweep against large window areas. All floor space can be utilized because the heating elements are concealed. Comfort is uniform over the entire area. Fuel economies are substantial.

The mechanical differences between radiant heating and other types are few. One of these is that, instead of relying upon small high-temperature elements, radiant systems operate with just one large low-temperature element—generally the floor; sometimes also the ceiling. The same kinds of equipment and controls used for conventional forced hot-water heating are used in radiant heating systems.

"Radiant Station" Design

As in designing any heating system, the design of a radiant heating system should be based on sound principles of engineering. To illustrate how it is done, a design has been worked out for a typical medium-size passenger station, which, for the purpose of this discussion, we will refer to as "Radiant Station." This station contains a waiting room with 832 sq. ft. of floor area; baggage room, 1,048 sq. ft.; boiler room, 196 sq. ft.; ticket office, 137 sq. ft.; ladies' lounge, 126 sq. ft.; ladies' rest room, 120 sq. ft.; men's rest room, 120 sq. ft.; and private office, 60 sq. ft.

The designing of the radiant heating system for this station involved three main steps, as follows: (1) The heat losses were calculated on the basis of B.t.u. per hr. per sq. ft. of floor surface; (2) the pipe size and spacing, and the operating water temperature, were decided upon; and (3) the boiler, pumps and controls were selected. The first step is in line with the procedure used in designing any kind of a heating system. Heat losses, except those for the floor, are calculated by using conductance and transmission coefficients for the various kinds of building materials and the wall openings, also taking into consideration the proper minimum outdoor temperature. In radiant heating, a factor is added— generally 15 to 25 per cent—for downward and edgewise losses to the ground. Experience has shown that these downward losses are negligible in actual operation, but it is considered good practice to include them to provide a reserve for starting up, to take care of exposed piping losses, etc.

Once the heat losses are known in terms of B.t.u. per hr. per sq. ft. of floor, the next consideration is: How much pipe is required in the floor to compensate for them? Obviously, a wide variety of pipe sizes, spacing and water temperatures could be used. It has been found that most systems operate efficiently with the water at temperatures of 120 deg. to 140 deg. The primary objective is to select a combination of pipe size and spacing and water temperature that will be consistent with economical installation.

Placing a concrete floor over wrought iron radiant heating pipes that have been positioned on a bed of crushed rock. Light reinforcing mesh has been placed over the pipes

Radiant Heating Design Statistics for Radiant Station

Room	Ft. of 1¼-in. Pipe	Ft. of 1½-in. Pipe	Ft. of 2-in. Pipe	*Total Equiv. 1¼-in. Pipe	Heat Loss in B.t.u.	Floor Area in Sq. Ft.	Heat Load Per Sq. Ft. (B.t.u. per Hr.)
Boiler	63		30.5	106.5	8,100	196	41.5
Baggage	509	42	127	738.5	56,150	1048	53.5
Office	45.5	.	8	57	5,200	60	86.5
Ticket Office	56		17	80	7,300	137	53.5
Waiting Room	508.5	42	109.5	716.5	65,500	832	79
Ladies' Lounge	80	..	7	90	8,220	126	65
Ladies' Rest Room	99	..	20	127.5	11,640	120	97
Men's Room	132	..	....	132	11,850	120	99

* Pipe size is reduced to common denominator—in this case 1¼ in.—to simplify heat output calculations.

Simple Calculations

Under ordinary conditions, a heat-transmission value of 3.5 B.t.u. per hr. per sq. ft. of external pipe surface and per degree of temperature difference, water to air, has been found to be efficient for concrete floors. To simplify the calculations from this point, the A. M. Byers Company, Pittsburgh, Pa., has prepared the accompanying chart which shows 15 different combinations of pipe sizes, spacing and water temperatures to produce certain heat outputs. These are based on commonly used pipe sizes.

The waiting room of Radiant Station affords an example of how the chart is used. This room requires a heat output of 79 B.t.u. per hr. per sq. ft. of floor. By locating this figure on the chart, and deciding to use 130-deg. water, it was determined that 1¼-in. pipe, spaced on 12-in. centers, was the proper combination. Next, the total quantity of pipe required for the entire room was obtained by working out the following formula:

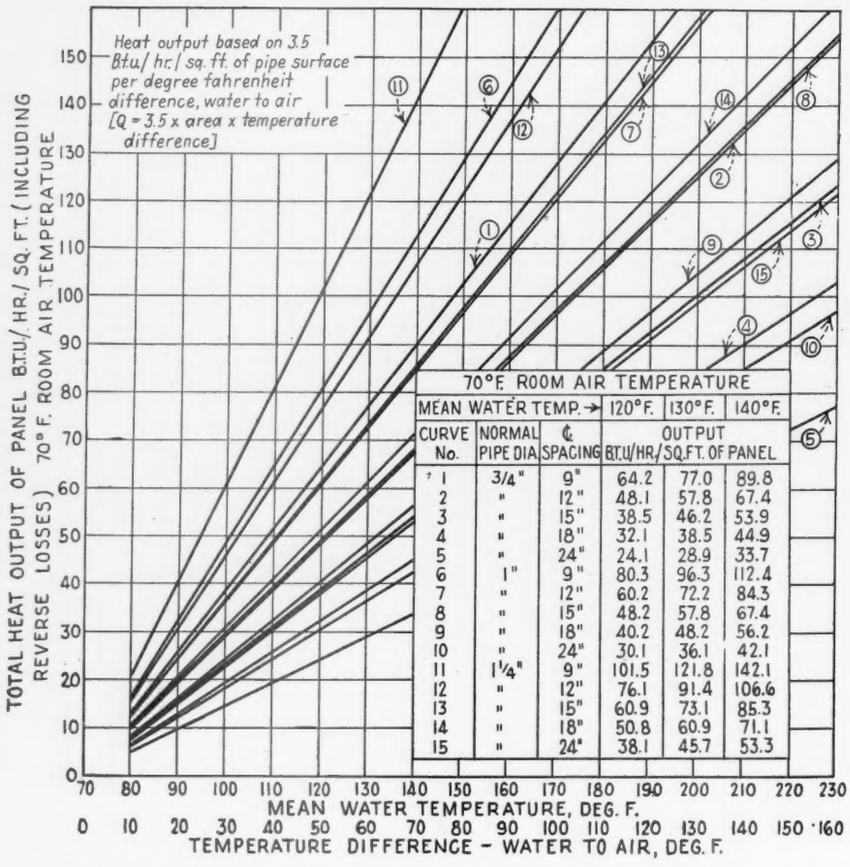
$$P = \frac{HL}{3.5 \times A \times dT}$$

In this formula, P equals the linear feet of pipe required; HL, the total heating load for the room; A, the external pipe-surface area per linear foot; and dT, the temperature difference between the water and the room air.

The external pipe surfaces per linear foot for various sizes of wrought iron pipe are as follows:

Nominal pipe size (in.)	Surface area per linear foot (sq. ft.)
½	0.22
¾	0.275
1	0.344
1¼	0.435
1½	0.498
2	0.622
2½	0.753

After the total required quantity of 1¼-in. pipe was calculated by the formula given above, the coil pattern was selected. Two different patterns are used most frequently—the sinuous coil and the grid. The latter is generally used for large areas because excellent thermal distribution can be obtained with a minimum of frictional resistance. For the baggage room and part of the waiting room of Radiant Station, the grid design was selected. For the other areas sinuous coils were used. When calculating heat output, however, the fact that the grid headers (supply and return mains) also are responsible for producing additional heat necessitates that proper allowance be made for them.



70°F. ROOM AIR TEMPERATURE

MEAN WATER TEMP. →			120°F.	130°F.	140°F.
CURVE No.	NORMAL PIPE DIA.	℄ SPACING	OUTPUT BT.U/HR./SQ.FT. OF PANEL		
1	3/4"	9"	64.2	77.0	89.8
2	"	12"	48.1	57.8	67.4
3	"	15"	38.5	46.2	53.9
4	"	18"	32.1	38.5	44.9
5	"	24"	24.1	28.9	33.7
6	1"	9"	80.3	96.3	112.4
7	"	12"	60.2	72.2	84.3
8	"	15"	48.2	57.8	67.4
9	"	18"	40.2	48.2	56.2
10	"	24"	30.1	36.1	42.1
11	1¼"	9"	101.5	121.8	142.1
12	"	12"	76.1	91.4	106.6
13	"	15"	60.9	73.1	85.3
14	"	18"	50.8	60.9	71.1
15	"	24"	38.1	45.7	53.3

Chart that has been developed as an aid in determining pipe size and spacing, and the mean water temperature needed, to produce desired B.t.u.'s per hr. per sq. ft. of floor area, with wrought iron pipe buried in concrete

So that different comfort conditions could be established as desired without affecting other areas, individual coils or grids were installed in each room of Radiant Station. For example, the design temperature of the baggage room is lower than that in the lounge. Balancing valves were installed on each coil to regulate water flow. The size of the pump to force water through the coils was based upon the calculated frictional resistance in the entire system. In very large systems, such as those in huge buildings, separate pumps may be used for each coil or group of coils.

The question of what type of controls to use at Radiant Station was left open because, in a radiant heating system, virtually any of the control devices commonly used—from the simple thermostat to the more elaborate types—may be employed. It is up to the design engineer to select the type of control he feels can best be adapted to the individual installations, keeping in mind budget limitations. The same situation is true of boilers—any type of hot-water boiler, fired by any type of fuel, may be used.

The thickness of the concrete floor depends primarily upon the engineer's calculations of loads and stresses. Radiant heating coils may be placed at the bottom of the slab or as close to the top surface as two inches, provided properly mixed and cured concrete is used. Coils need not interfere with whatever reinforcing is used in the floor slab.

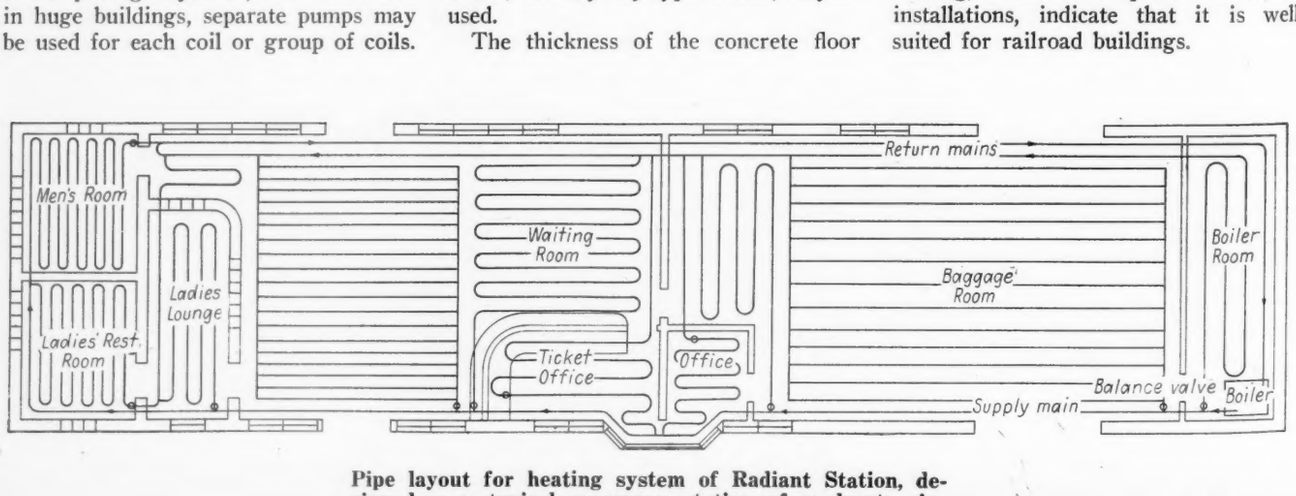
Some designers elect to place reinforcing mesh either below or above the coils before the concrete is poured. After the coils have been welded the entire system should be tested under hydraulic pressures of 125 to 200 lb. per sq. in. for several hours before the concrete is poured. Any type of finish flooring can be used with radiant heating systems. Terrazzo is a common choice for passenger stations.

What Piping Material?

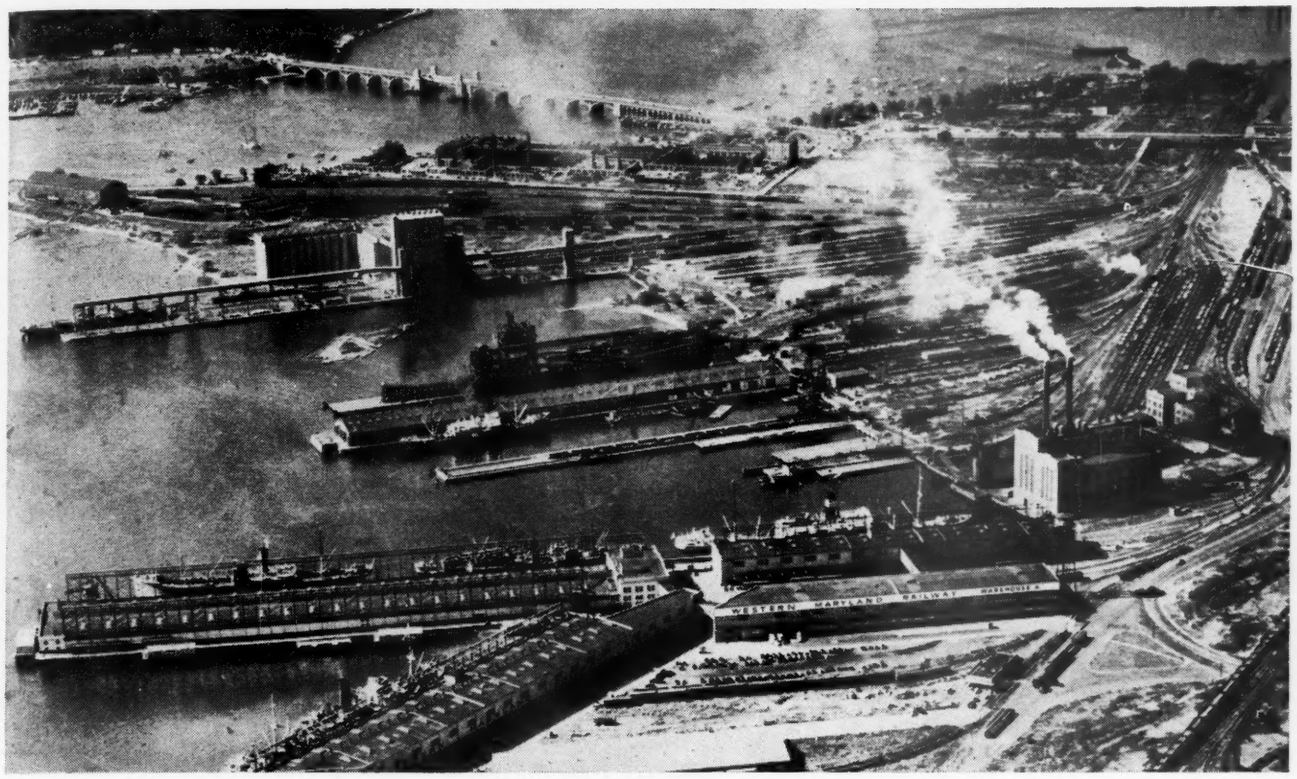
Pipes buried in concrete are exposed to some external and internal corrosion, must expand at virtually the same rate as concrete to minimize cracking of the concrete in expansion and contraction, and must be easy to fabricate. Therefore, the question of which piping material to use is an important one. In the past 10 years most radiant heating systems have utilized wrought iron pipe because this material — used in large quantities in the railroad industry for locomotive and AB brake piping on rolling stock, and for many other services where the pipe is subject to corrosion and fatigue—has unique properties which make it corrosion-resistant and easy to bend and weld.

The initial cost of a radiant-heating system today is reported to be no higher than for any forced-hot-water system or a good warm-air installation.

Improving the physical facilities of passenger stations, from the standpoints of both comfort and attractiveness, is one of the current objectives of most railroads, and heating is a prime consideration. The advantages of radiant heating, as shown in upwards of 10,000 installations, indicate that it is well suited for railroad buildings.



Pipe layout for heating system of Radiant Station, designed as a typical passenger station of moderate size



Aerial view of the Western Maryland's Port Covington Tidewater Terminal, along the Patapsco river in Baltimore harbor

Radio Facilitates Terminal Operations

Tidewater installation on the Western Maryland at Baltimore, Md., permits two-way conversation between yardmaster's office, five switch engines and a launch

By J. A. ABBOTT
Superintendent, Hagerstown Division, Western Maryland

AS a means of facilitating operations and thereby giving better service to customers, the Western Maryland has installed two-way radio communication between the yardmaster's office, five Diesel-electric switch engines and one towing launch in its Port Covington Tidewater Terminal in Baltimore, Md. The facilities at this terminal include a combination of railroad classification and storage yards, coal piers, a bulk cargo pier, a grain elevator, warehouses, docks and berthing space for 23 ocean-going ships, as well as car-float bridges and floats for delivery of cars to ship-side or various locations on shore in the Baltimore bay area. The floats have capacities ranging from 10 to 22 cars. We have heavy trade with Sparrows Point and Canton. By using our own floats we can facilitate delivery of cars to these points, sometimes saving 10 or 12 hr. as compared with delivery by rail.

A large volume of shipping is handled by our combined facilities at Port Covington—the following figures are for a typical month: (1) grain unloaded to elevators, 2,287 cars; (2) coal and coke, 6,821 cars; (3) merchandise for export, 1,500 cars; (4) ore unloaded, 40,000 tons; and (5) car-float operations, 5,000 cars. All of our Port Covington Tidewater Terminal facilities are operated three eight-hour shifts daily. Of the 10 locomotives in service in this terminal, 7 are Diesel-electric switch engines and 5 of these are equipped with radio. One towing launch is also radio-equipped. The fixed radio station is in the yardmaster's office.

A new and novel feature of our radio installation is the use of "cross-channel" communication. Two channels are used, one for calls initiated by the fixed station to any one or all of the mobile units, and the other for calls initiated by any mobile unit to the fixed station. This means that the crews in different locomotives cannot carry on conversations by radio. Thus the purpose of the cross-channel system is to prevent trivial or unnecessary conversations between the different crews. Necessary communication between locomotives can be accomplished through the yardmaster's office.

The radio allows the yardmaster to keep in close touch with crews working in all parts of the terminal. Some of these areas are remote and difficult to reach on foot. Furthermore, no telephones are available, even if there were some means for calling the conductors to such phones. With the radio, calls can be made quickly and at any time. This enables the yardmaster to direct

The yardmaster issuing instructions by radio to one of the radio-equipped switch engines. He can also talk to a launch in the harbor

the work of the crews according to changing requirements, and thereby the switch engines are utilized effectively rather than wasting time which was formerly consumed in layovers when the crews finished assignments and could not get in touch with the yardmaster to receive further instructions.

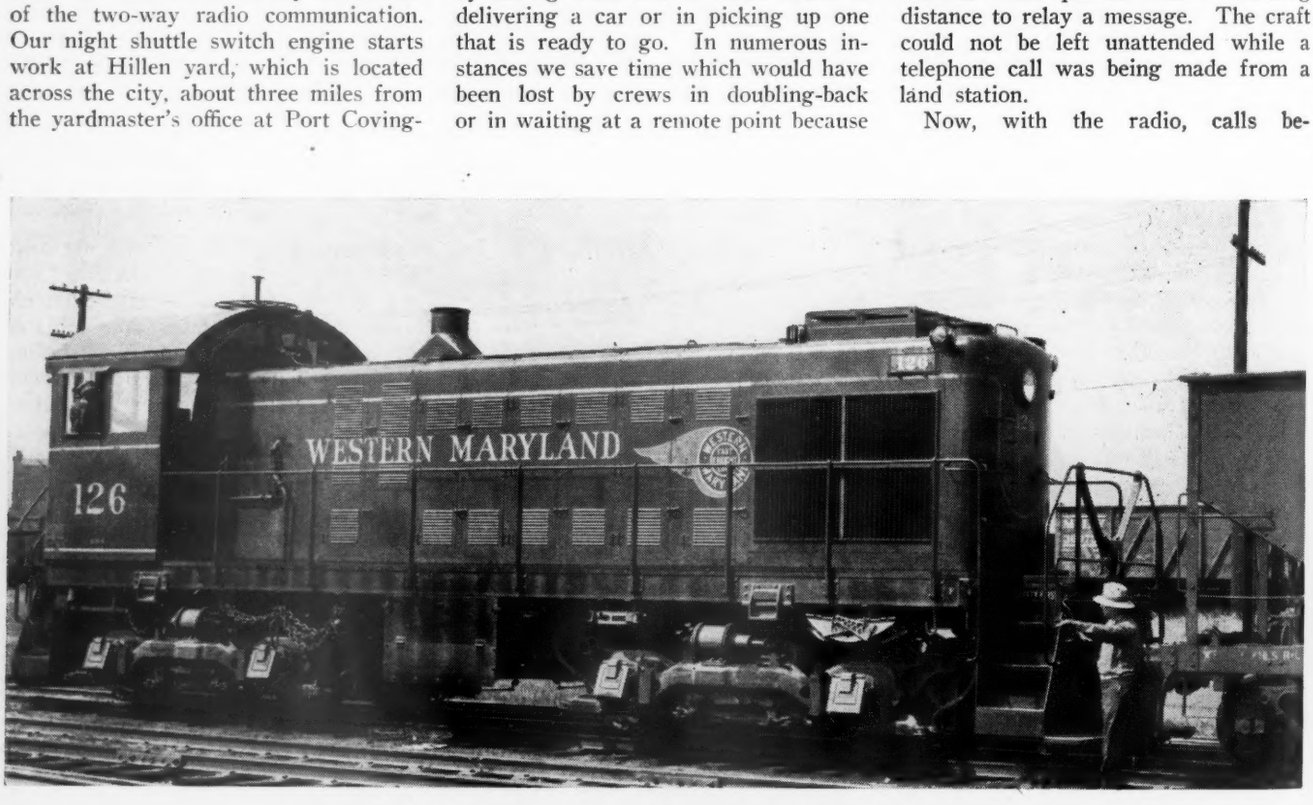
I can cite several case histories to show the extent and variety of benefits of the two-way radio communication. Our night shuttle switch engine starts work at Hillen yard, which is located across the city, about three miles from the yardmaster's office at Port Covington. When this night crew goes on duty, the conductor calls the yardmaster to line up the work to be done. By this procedure, and subsequent calls, the conductor keeps the yardmaster informed of the consist of the train, no matter where the crew is working. By this frequent exchange of information, we can give our customers better service by saving from one to three hours in delivering a car or in picking up one that is ready to go. In numerous instances we save time which would have been lost by crews in doubling-back or in waiting at a remote point because of order changes. Thus the facility which the radio affords to make changes in orders en route is of great value.

Additional Examples

On one occasion two cars of oil were to be loaded on a vessel which was waiting at one of our piers. A delay occurred in the arrival and switching of the cars, which would ordinarily have meant that the ship would have had to sail without the oil, or that its departure would have been delayed. Either contingency would have been regrettable, and the loss to the shipper and the railroad would have been appreciable. With the radio, here is what happened: The yardmaster used his radio to call a shuttle engine working outside the terminal and alerted the crew to watch for the car numbers. In the meantime, the yardmaster, by use of the radio, was able to arrange for a yard engine in ample time to get the two cars of oil on the ship. I doubt whether this could have been done without the flexibility of communication afforded by the radio.

The towing launch, which is equipped with radio, serves to coordinate switching operations with the arrival of car floats, lighters and scows at the various piers and ship-sides. Previously these operations were hampered because there was no means of communication between the shore and the launch. The launch had to lay off-shore until someone in another craft passed within shouting distance to relay a message. The craft could not be left unattended while a telephone call was being made from a land station.

Now, with the radio, calls be-



One of the five radio-equipped Diesel-electric switching locomotives, showing the engineer conversing with the yardmaster

tween the yardmaster's office and the launch can be made quickly.

Recently a storm damaged a cable so that the entire "South" telephone exchange, serving Port Covington, was out of service. Until repairs were made, we handled all our business through another exchange by placing a radio-equipped yard engine at a suitable location and using the radio to relay messages.

And It Pays Its Way

The yardmasters, members of the crews and others have had no difficulty in learning to use the radio. These men all like this new means of communication because it eliminates a lot of walking and saves time all through our day-and-night operations. As a result, we are expediting our operations in the terminal area and we are giving our customers better service. The cost of the radio equipment, including the six mobile stations and the one fixed station, with spare apparatus, was approximately $12,700. A conservative estimate is that the radio communication system increases the utilization and efficiency of switch engines and the launch about 10 per cent. Therefore, the radio, in my opinon, will pay for itself in a relatively short time.

The radio apparatus was furnished by Bendix, and was installed and is maintained under the jurisdiction of K. L. Muse, our superintendent of signals and communications. The equipment is standard as applied to both the mobile and the fixed stations. The maintenance schedules call for detailed inspections and tests of the radio equipment once each month when the locomotives are routed through the enginehouse for routine inspections. In no instances that I know of has the radio equipment failed while engines were in service.

Thus, from strictly an operating viewpoint, we are enthusiastic about our radio communication, because this, our first installation, has proved to be more valuable as we become more proficient in its use.

"44-Tonner" Revives Branch Road

A 44-ton Diesel-electric locomotive, plus the lower costs and flexibility made possible by local management, bring a former branch-line railroad back to life

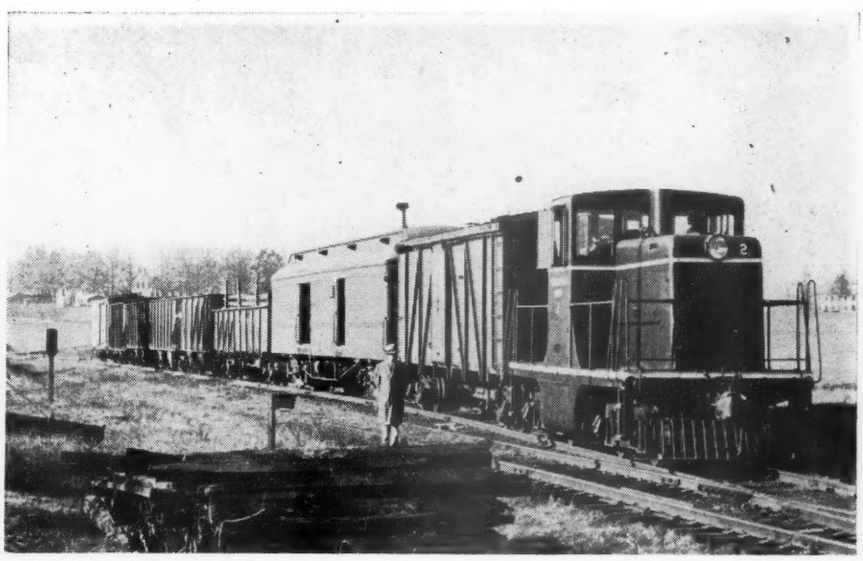
IN a determined effort that their community should not lose its railroad service, ten energetic citizens of Taylorsville, N. C., formed the Alexander Railroad, and on February 7, 1946, took over operation of an 18½-mi. branch line formerly operated by the Southern, abandonment of which had been authorized by the Interstate Commerce Commission. Their story is one of success in that they not only accomplished their objective, but adopted means to that end which have proved reasonably profitable.

The new railroad — possession of which was acquired at scrap value — has been able to produce a net income almost from the start, and has already paid a three per cent dividend to its stockholders. The Alexander — named for the county which it serves — extends from Taylorsville (population—1,122) to Statesville, where connection is made with the Southern. Two intermediate stations have a combined population of barely 1,000. The principal industries served by the road are hosiery and yarn mills.

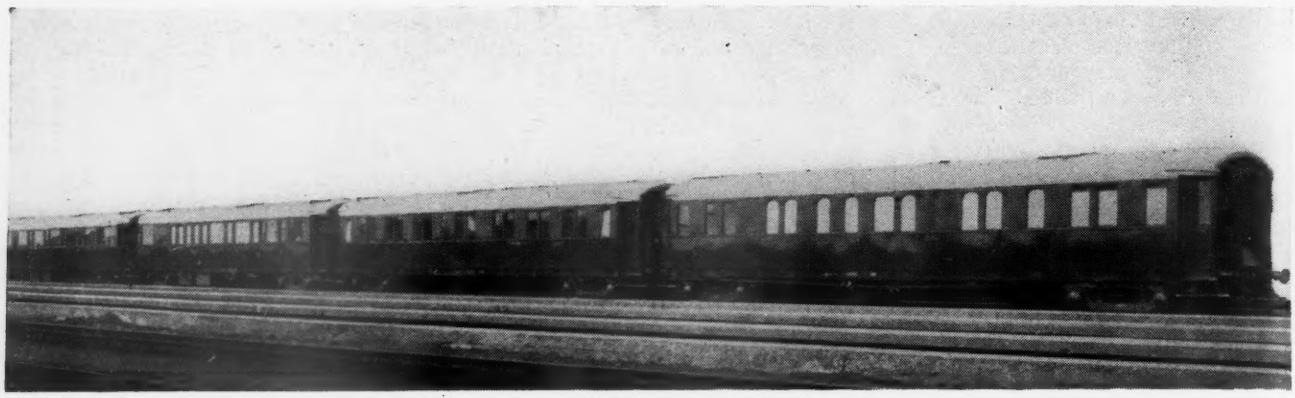
Operation was originally begun with a leased steam locomotive but fuel and maintenance costs proved excessive. The company then succeeded in getting, through the War Assets Administration, a used Diesel-electric locomotive from the U. S. Maritime Commission shipyards at Wilmington, N. C. Operation of this type of motive power proved its superiority, but this particular locomotive was not capable of speeds in excess of 20 m.p.h. and, therefore, experienced difficulty in overcoming several momentum grades on the line.

Based on experience with this locomotive, however, the Alexander purchased a General Electric 44-tonner in August, 1946. The used Diesel was sold, and the G. E. 380-hp. locomotive has been the sole motive power on the railroad ever since. In addition to performing the switching service at Taylorsville, its assignment includes the 37-mi. round trip to Statesville six days a week, hauling mail, express and carload and l.c.l. freight. Not infrequently the volume of traffic requires a second round trip over the road. No maintenance difficulties have been encountered, and the new locomotive has reduced fuel costs to one-fifth of those experienced under operation with the leased steam equipment.

L. P. Zachary, a Taylorsville businessman, is secretary-treasurer of the enterprise, which employs a total of eleven people. The conductor is the only one with previous railroad experience.



This light Diesel-electric makes Taylorsville's railroad outlet a profitable one



French National Railroads Fight Disease with Clinics on Wheels

The train can be parked either in a station or on a siding

AMONG the activities conducted by the French National Railroads in the interests of employees' health are the radiology clinics on wheels, which are special trains now running throughout every region of France. These trains operate regularly through 13 areas where tuberculosis is prevalent as well as in localities where there are no qualified specialists. Some 300 railroadmen plus 300 members of their families are being examined daily.

It was more than 15 years ago that the French National Railroads began this service for the prevention of tuberculosis among its personnel and their families. The first mobile unit, which operated through the Nord re-

Left—The waiting-room coach. Right—The cubicle dressing rooms

gion, had one medical car equipped with radioscopy and X-ray equipment and one car fitted as living quarters for the medical personnel. In 1933 a waiting-room car was added, and the three-car unit was in use until the German invasion in 1940. After an interruption of a few months, service was resumed and continued until April, 1944, when the unit was severely damaged during bombing of the La Chapelle yards in the northern district of Paris. Construction of a new unit (the cars being converted coaches) was completed last summer at the Le Landy shops.

The Nord region has two such trains. The first train has a radiology car, a car housing the medical staff and a waiting room car. The second train, equipped to operate by itself, has only one radiology car.

The radiology car of the first train includes a small waiting room, two dressing rooms (opening on one side into the waiting room and on the other to the doctor's office), a room containing modern radiology and radioscopy equipment, and a laboratory for the development of X-ray plates.

The car in which the medical staff lives has a kitchen, a dining room which seats six, four bedrooms and three toilet-washrooms.

Neon Lighting

The waiting-room car, in which neon lighting has been installed experimentally, accommodates 54 persons. The medical staff reportedly considers utilizing this car also for lectures and movies on hygiene and health matters for the benefit of the workers' families.

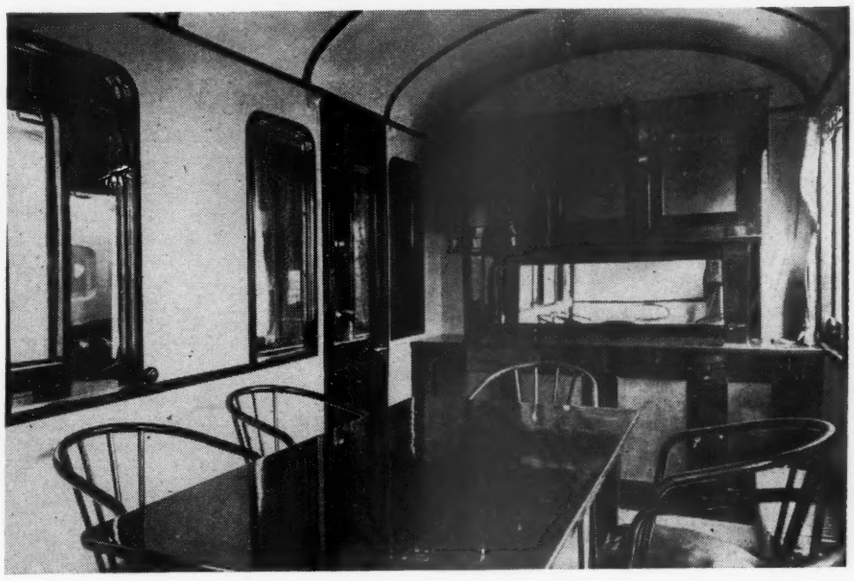
The one-car health unit which can operate either alone or in conjunction with the three-car train includes a waiting room, 14 cubicle dressing rooms, a radioscopy room in which there are telephone facilities connecting it to the doctor's office, and a doctor's office.

Electric lighting is obtained either from a self-contained 24-volt unit or from a 110-volt main supply when the coaches are stationary. Blue, red and white concealed lighting has been installed. Radiographic equipment is operated on a hook-up with the 110-volt main-supply circuit. In all trains the staffs are protected against radiation poisoning by the installation of lead screens.

The other four regions (East, West, South and Southwest) of the French system are each served by at least one completely equipped radiology clinic car. The French National Railroads plan campaigns against other diseases also, and the outfitting of one special car for this purpose is already being studied. It is a further aim that each workman shall be given a complete physical examination each year.

Radioscopic car in which personnel are examined and their histories are noted

The doctor's office in which the X-ray equipment is located



Dining room in the car which houses the medical staff

University Training for the Staff Man

Discussion of line versus staff officers and the differences in the types of education required for each—What colleges now offer

By STANLEY BERGE
Associate Professor of Transportation, Northwestern University

IN developing a policy for the procurement and training of personnel, transportation executives often ponder the question of college or university training. Does such training, on a full-time or part-time basis, provide anything beyond general cultural benefit to prospective and present employees in the transportation industry? Many a young man entering or proposing to enter the transportation industry is asking himself, "How may I obtain the best type of training for my career in this field? Should it all be obtained on the job; should I attend a special vocational school; or should I enroll in full-time or part-time courses in a college or university?"

The correct answers to the above questions become evident after consideration of the following fundamental questions:

(1) What is the nature of the jobs in the transportation industry?

(2) What are the basic training requirements for these jobs?

(3) Do the colleges and universities offer any training that (aside from general cultural education) will specifically satisfy the requirements of these jobs?

Line and Staff Jobs

There are two main categories of positions in the transportation industry —line jobs and staff jobs. This is because transportation companies—like most industrial companies today—have what is called line-and-staff organization. Borrowed from military organization, the terms "line" and "staff" are simple in concept. Line personnel are responsible for directing or performing the primary work of the company. Staff personnel are responsible for assisting and supporting the line personnel so as to facilitate and improve the performance of the company's primary work.

Just as production and sales are the primary line departments of an industrial concern, so the operating and traffic departments are the primary line departments of a carrier. Carrier personnel engaged directly in the primary work of producing or selling transportation service, or in the direction and supervision of such work, may be said to occupy *line* positions. Other personnel, both within operating and traffic departments and elsewhere in the carrier organization, whose duties assist and support the primary work of the line personnel may be said to occupy *staff* positions. Thus, the majority of personnel in the operating department occupy line jobs, but within the operating departments there may be certain positions which are clearly staff—such as fuel engineer or assistant to general manager in charge of research. In the traffic department most persons occupy line positions but there are often a number of positions that are clearly staff—such as assistant to vice-president in charge of traffic statistics, general industrial agent, general agricultural agent, or manager of traffic research. These are only samples; there are many others.

In addition to various staff positions created within the operating and traffic departments, the larger carriers have found it desirable to establish a number of separate staff departments, broadly classified into three groups — control, service and advisory. Staff departments exercising *control* functions commonly include accounting, auditing, finance, personnel administration and industrial relations. A few carriers have followed industrial practice in establishing the following additional staff agencies of control: budgetary control, cost control, organization control, industrial engineering and standard practices. Staff departments performing *service* functions include engineering, technical research and development, purchasing and stores, real estate, tax and insurance. The third group of staff departments performing *advisory* functions may include legal, public relations and economics research and statistics departments.

Training for Line and Staff

It is well to consider next what kind of training is required for optimum performance and advancement of the individual in line and staff work respectively. This leads directly into the peculiar knowledge and traits required for line and staff duties.

Top line executives—such as president or as vice-president-operations or vice-president-traffic—advance to their positions after many years of experience in line duties. Some of them take justifiable pride in their rise from "office boy to president." They possess a wealth of knowledge gained through long experience "on the firing line." Their mature judgment and ability to lead and direct are not accidental but are the products of many years of patient observation, trial and error. Furthermore, they have mastered countless details of procedure largely through informal on-the-job training and partially through specialized vocational courses. They have learned the importance of delegating appropriate authority and responsibility down through the ranks of the line organization. Finally, they appreciate and rely upon the assistance and support of properly qualified staff assistants and staff departments. They realize the impossibility of carrying a full load of daily line duties and at the same time giving adequate time to the performance of staff work.

The line personnel predominate in number and frequently in prestige. They do not have to be told that they are responsible for the *primary* work of the company. They look to the colleges and universities mainly for general cultural and technical education. The essential training of the line, all the way from office boy or apprentice to president, is obtained through *on-the-job training* plus the assistance of certain specialized *vocational schools.*

In contrast, staff positions require a somewhat "different sort of animal." Staff personnel must possess the capacity not to direct and perform the primary work of the company but to *assist and support* the primary work in all ways possible. A recent book on management* concludes that the staff organization, if adequately manned, "may be relied upon: (a) to determine needs and formulate appropriate plans, objectives, and controls; (b) to review, coordinate, digest, and pass expert opinion upon proposals; and (c) to keep executives informed of significant developments."

Among the traits required of successful staff personnel, then, are tact and diplomacy, wide perspective, objectivity, absence of bias or prejudice or preconceived ideas, curiosity, cautious enthusiasm for new ideas, analytical ability,

* Holden, Paul E., L. S. Fish and H. L. Smith. *Top-Management Organization and Control.* Stanford University Press, 1941.

thoroughness, accuracy, tenacity, and power of expression, coupled with ability to sell or convince. There are some who will say that a good staff man must be at least 50 per cent salesman. In any event he cannot afford to lack courage of his convictions, once he reaches a conclusion backed by facts. He should possess a degree of literary ability and the power to speak effectively.

The staff man realizes that the work he does is not routine but creative. His resourcefulness is his primary characteristic. He is content with rather thin tenure and rests his security more upon creative ability than upon the seniority line. In fact, one may go so far as to say that the successful staff man advances more into jobs he personally creates than into previously established, well-defined positions. He has little need for a placement bureau.

So far, this discussion may have left the impression that once a man is engaged in and trained for line duties, he remains line; and once he is assigned staff duties he must always remain staff. This is not true in practice. Very frequently the individual alternates a number of times between line and staff work in the course of his career. It is especially true of persons whose work is predominately line but who, from time to time, are assigned to special staff duties or studies of a temporary nature.

To conclude: it is evident that to achieve competence and distinction in staff duties requires more than on-the-job and special vocational training. The staff man is first, last and always a student. Much of his education is informal and is gained by wide reading and observation. The colleges and universities simply provide the means for his more rapid attainment of the broad training he requires. If his primary interest is engineering, he relies heavily upon the engineering schools and technical institutes of the universities. If his interest lies more in the direction of law, he calls upon the law schools. If he wished to do staff work in transportation economics, including the many aspects of the science of management, he looks to the schools of commerce and business administration.

Training for Transportation

While persons engaged in transportation line positions look to the colleges and universities mainly for general or cultural and technical education, persons wishing to excel in staff work must obtain more specialized training. Beyond basic instruction in the liberal arts and sciences, classics and humanities, the candidate for staff positions in transportation will do well to acquire professional training in *engineering, law* or *business administration*. Inasmuch as engineering and legal training and their application to staff work in transportation are reasonably well understood, they do not require further discussion here.

The school of commerce and business administration is the most recent of the principal professional schools to be added to the modern university. Even more recent is the birth of an integrated program of specialized university courses in transportation economics and transportation management.

Such special business courses for staff personnel in transportation are still afflicted with growing pains. Books must be written and qualified instructors obtained. However, considerable progress has been made already, primarily because leaders in the transportation industry (occupying both line and staff positions) have freely given the universities a great deal of time and valuable advice.

Review of the undergraduate programs of approximately 50 collegiate schools of business reveals a general policy of three steps or phases in the training of staff personnel for the transportation industry. First, students are enrolled in certain liberal arts courses designed to assist them in obtaining a broad general education. Second, students are encouraged to complete a group of courses in eight so-called "core subjects," which are fundamental "tools" for all business—accounting, business economics, business law, business statistics, business writing, finance, marketing, and production management. Third, there is offered a specialized program of courses dealing with various aspects of transportation economics and transportation management. To date only a few colleges and universities, located in transportation centers, have developed comprehensive specialized programs of this type.

The Other Side to the "College Man" Argument

Uneasy lies the head that manages a modern industry—or, anyhow, it would lie uneasy if it were fully alert to the dependence of further human progress on the intelligence and courage with which that head is endowed. For that matter, mankind can hardly hope to hold on to the progress it has already achieved, unless management does a better job of getting along with people, especially employees, in the next couple of decades than it has in the past thirty years.

Such conclusions are, in substance, the message of a recent pamphlet* by one of the country's acute students of human relations in industry, Professor Burleigh B. Gardner of the University of Chicago. Dr. Gardner put in five years at the Hawthorne Plant of the Western Electric Company, where he participated in what were probably the most fruitful basic studies in employee relations ever conducted (some of the major conclusions of this and similar studies having been noted in a book review in this paper in the issue of March 30, 1946, page 682).

So when such an author sees troubled times ahead for management of industry, his warning, and his prescription for avoiding or mitigating these troubles, is worth listening to.

The industrial process has aimed at developing the most efficient use of expensive machinery—with a minimum of intelligent concern for and study of the effect of the process on human beings, with the result that the machines operate smoothly but the people don't. The railroads are not as badly off as repetitive industry in their contribution to employee unrest, but their record isn't perfect. Dr. Gardner cites the case of a "small, stable, railroad town" where the nature of every man's job is known and its holder is respected in the community for what he does—but such railroad employment doesn't provide much appeal "for the ambitious youngster." There is, in short, too much seniority and not enough "mobility" in the railroad picture for optimum employee satisfaction. And employee dissatisfaction is just as much a job of management to avoid and correct as is the functioning of a machine which isn't working right.

Indeed, the author believes this lack of "mobility"—i.e., from the ranks into management—is a major danger. Too many industries are recruiting all or most of their management material from the ranks of "college men." While industry doubtless needs the training these young men have to offer, it also needs to keep open a route to the top from down in the ranks, so that no man need feel he is behind the eight-ball unless he is resting there voluntarily by reason of his unwillingness to exert himself to merit advancement. This route could be kept open, not by straight promotion from the ranks without special training, but by affording educational advantages to capable and energetic employees, enabling them to match the qualifications of the "college men".

There is a check list of four points by which any management can test its behavior toward employees, and discover whether it has the kind of organization which is solving employee relations problems or is adding to them.

* "Man in Industrial Society," 24 pp., Published by Human Events Associates, 608 S. Dearborn street, Chicago. Price, 25 cents.

The first course of specialized university training in transportation economics and management is ordinarily a "survey of transportation" based on a textbook in the economics of transportation. This course has three primary objectives: (1) to acquaint the student broadly with the scope and economic functions of land, air and water transportation, (2) to point out current problems and policies in connection with transportation facilities and services, and (3) to introduce the student to literature and source material providing historical and current factual information.

The initial survey course is followed by one or more courses in "Freight Traffic Management," "Freight Rates and Tariffs," "Freight Rate Making and Rate Structures." Next, a special course is provided dealing with the "Economic and Technical Development of Passenger Transportation." Here it is realized that the greatest understanding of any single mode of passenger transport comes to those who will obtain perspective by the study of all modes. Analysis of the travel market and the economics of private automobile transportation are followed by study of passenger services, traffic and fares of each type of common carrier.

Following general freight and passenger study, more specialized intermediate courses are offered in each of the principal types of transportation. Separate courses deal comprehensively with the economics and management of the several types of carriers. For instance, one university offers the following: "Air Transportation," "Motor Transportation," "Railroad Transportation" and several courses dealing with "Shipping in World Trade."

Object of Training

The advanced courses embrace "Transportation Law" and several formal or informal courses having to do with economic research in transportation. In one university, a course in "Transportation Research Methods" considers the application of economic research techniques to the solution of transportation problems. Here attention is directed both to investigation and presentation methods on individual studies undertaken by members of the class. A further advanced course entitled "Problems in Transportation" provides organized class discussion of selected current management problems based upon the facts of actual cases derived from industry. Finally, the undergraduate program terminates with independent study, in which superior students undertake the study of some special phase of transportation not covered otherwise.

The objective of the colleges and universities in offering such specialized training of personnel to perform staff duties competently and with imagination is to produce personnel who not only know how to do analytical staff work in support of the line organization, but who also know how to present ideas convincingly to the management. Ideas which are not clearly thought through and lucidly expressed have little value and certainly do not represent the "complete staff work" which the transportation industry requires.

By helping present and prospective personnel develop the traits requisite to staff leadership, the universities have a significant role to play in the future progress of transportation.

St. Louis Refrigerator

(*Continued from page 51*)

2 in. by 2½ in. Naturzone insulation.

Roof construction of the 1947 cars is again substantially the same as the 1940 design, except for an added course of 90-lb. Mulehide insulation paper next to the ceiling, different spacing of the 5/16-in. plywood insulation between the carlines and an added course of 1-in. Naturzone. These changes also assure more efficient insulation.

In the 1940 cars, all roof lap joints are coated on the underside with roof packing compound. In the new cars a coating of roof packing compound is applied over the entire roof between the sub-roof and outside roof, which acts as a binder and, in effect, gives a 7/8-in. plywood roof, but should it be desired to renew the outside plywood roof as a result of wear or any other reason, it will not be necessary to disturb the sub-roof. The application of this roof packing compound also eliminates weaving of the roof, which places considerable strain on the nails securing the roof while cars are in motion.

In the 1940 cars, galvanized-iron caps are set in grooves on the saddles. These caps have been eliminated and replaced with No. 3 heavy roof-paper caps which extend over the sides and edges of the saddles. In this manner the saddles are completely protected from weather and moisture. As already mentioned, 2-in. hot galvanized recessed-head wood screws used to secure the outside roof have been eliminated and replaced by cement-coated barbed car nails.

In order to protect the plywood roofs from the sun and eliminate all grain rise, the entire roof is covered with approximately 1/8 in. of Mortex No. 4 liquid asphalt, which is applied by spray after a coat of Milar's No Krode primer sealer and a coat of mineral paint are applied to the outside face and all edges of the outside plywood roof. Over this Mortex, a coat of tile-red slate granules is sprayed which gives an attractive appearing roof adequately protected against any grain rise.

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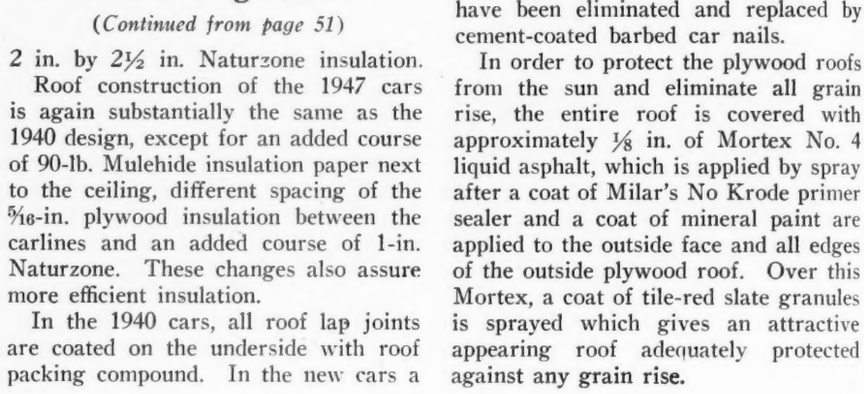


Diesel-electric locomotive designed for the Hawaiian sugar industry by the General Electric Company. The standardized line comprises 30-ton, 310-hp. locomotives for 30- or 36-in. gages, and a 40-ton, 420-hp. model for 36-in. gage. Powered by two Cummins Diesel engines per cab, of either 170 or 234-hp., they have a maximum safe speed of 30 to 35 m.p.h., and full engine utilization to 15 to 20 m.p.h. The generators are shunt wound and the traction motors series wound, both d.c. Motors and engines have complete air-filtering equipment. Two-axle equalized swivel trucks are used for easy negotiation of short curves

British Transport Commission Takes on Task of Nationalization

Integration of land transport must be accomplished under terms of state-ownership law effective January 1

LEGISLATION to effect the nationalization of the railroads of Great Britain, along with the canals, privately owned freight cars, railroad hotels, and for-hire truck operations extending beyond 40-miles distance, was completed August 6 when the "royal assent" was given to the amended bill passed by House of Commons the day before. While it was modified in many minor respects during its progress through Parliament, the final version of the bill incorporates every important provision of the proposal introduced by the Labor government late last year. These provisions were outlined in *Railway Age* of December 21, 1946, page 1058.

On next January 1 the British government, therefore, will assume ownership and management of a transport system including four principal railroads and 56 local or short lines, aggregating 56,000 miles of line, much of which is multiple track and intensively used, and some 580,000 privately owned freight cars. The stockholders who have owned these railroads will receive for their equities so-called government stock on the basis of the market price of the railroad stocks on a fixed date. Opponents of the government ownership plan have charged that this basis of exchange will result in partial confiscation.

The administration of the British state railroads, and of the other agencies of transport taken over by the government, will center in a Transport Commission, the membership of which was announced by the Minister of Transport on August 8. The five-man commission includes the following: Sir Cyril Hurcomb, chairman, Lord Ashfield, Lord Rusholme, Sir William Wood, and John Benstead. The actual management of the railroads is to be in the hands of a Railway Executive, while similar organizations will control the other transport agencies under the commission. The law provides for the commission's acquisition of control of the bus lines when it decides so to extend its operations. Railroad and other rates will be proposed by the commission, which is enjoined by the law to establish them at such levels that operations, on the average, will meet expenses "properly chargeable to revenue," but such proposals must be passed upon by a Transport Tribunal.

The chairman of the new commission has been in British government service since 1905, when at the age of 23, and after being educated at Oxford, he was given a position in the Post Office. He advanced in that department, later became an executive in the Ministry of Shipping, and in 1919, upon the formation of the Ministry of Transport, he was appointed assistant secretary in its finance, rates and statistics department. From 1927 to 1937 he was secretary of the ministry. In the latter year he was named chairman of the Electricity Commission, and in 1939 he became director general of the re-created Ministry of Shipping, later assuming the same title in the Ministry of Transport when the shipping agency was absorbed into it. He was appointed secretary to the Ministry of Transport in 1946.

Rich and Varied Experience

Of the other commissioners, Lord Ashfield has been chairman of the London Passenger Transport Board, operating the rapid transit facilities of the British capital since it was set up in 1933, while Sir William Wood has been president of the London, Midland & Scottish, the largest of the four principal British railroads, since 1941. Lord Rusholme, who has been general secretary of the Cooperative Union since 1929 and is joint secretary of the National Council of Labor, is regarded as a representative of the shippers' and travelers' viewpoint, while Mr. Benstead, general secretary of the National Union of Railwaymen, is especially familiar with the interests and the problems of the employees of the railroads.

The measures which the new commission and the Railway Executive may take in compliance with the requirements of the nationalization law are the subject of current speculation in Great Britain. There is a unanimity of opinion, apparently, that the inauguration of state control could hardly have been undertaken at a more difficult time, in view of the general economic crisis with which the British government and people are faced. Whether this means that the new administration will resort to radical operations on the established transport system in an effort to root out all traces of private management methods, or that it will proceed slowly to bring about an integration of facilities, first of the various railroads and then of the railroads and other forms of transport, has not yet been indicated.

The British have had some experience with the difficulties of assimilating independent railroad companies into relatively large systems as a result of the compulsory reorganizations effected under the Railways Act of 1921, when the four main-line companies assumed their present status. Of these, the Southern and Great Western together handle about one-third of the volume of business done by all the British roads, while the London & North Eastern accounts for a little less than a third, and the London, Midland & Scottish a little more than a third, of the total, as measured by freight and passenger revenues.

The two smaller companies each have a relatively simple unified managerial organization, but the L. M. & S. has a centralized departmental organization, headed up by vice-presidents, in which practically all authority, except in strictly routine matters, rests in the main office, while the L. & N. E. organization is on regional lines, having three divisions, each in charge of a general manager, with the central office and top officers being more concerned with matters of policy and finance than with traffic, operating and mechanical questions.

In this diversity of practice there is little indication what form of organization the new commission will establish to carry out the integration of inland transport, which is one goal of the nationalization law. In the debate in Parliament speakers for the Labor Party consistently refrained from indicating what plans, if any, have been formulated for the unification and coordination of the several forms of transport. As secretary to the ministry, the chairman of the commission has been given credit for the drafting of the nationalization law, so there is no doubt that its administration will be in sympathetic hands.

Non-op Increase Adds $438 Million to Railroads' Wage Bill

Arbitration board in a 4-to-2 decision awards 15½ cents per hour more to about one million employees

AN AWARD was handed down on September 2 by the arbitration board handling the dispute between the nation's railroads and unions representing their non-operating employees with respect to their 20-cent hourly pay increase demand which will add $438,000,000 annually to the operating costs of the carriers, according to Association of American Railroads' computations. This figure includes $406,000,000 in wage payments and $32,000,000 in increased payroll taxes, based on the 1946 level of employment, without taking into account increases that may have to be paid to employees not represented before the arbitration board.

The 15½-cent hourly increase which the board awarded the non-ops, effective September 1, brings pay hikes won by them since January 1, 1946, to a total of 34 cents an hour, which, considering the evidence presented to the board, would indicate that the gains of railroad employees in that period of time have been considerably in excess of the gains of those employed in industry generally. According to an exhibit placed before the board by the unions' witnesses, earnings per hour of employees in 25 selected manufacturing industries have gone up 40.2 cents since September, 1941, while, with the increase just granted, gains for the non-ops over the same period amount to 48.4 cents per hour. This increase (still using the employees' own testimony) brings average hourly compensation of railroad non-operating employees to 121.8 cents per hour, or 65.8 per cent greater than in September, 1941. Wage increases applicable to these employees during 1946 totaled 18½ cents hourly, 16 cents being granted effective January 1, 1946, and 2½ cents effective May 22 of the same year.

Following 20 days of hearings which opened on August 4 and closed on August 28 (See *Railway Age* of August 9, page 75; August 16, page 73; August 23, page 58 and August 30, page 52), the six-man arbitration board, whose decision the carriers and employees had agreed to accept as binding, handed down its findings and award on September 2, reading as follows:

(1) With respect to the question of the increase in all existing rates of pay, the board awards an increase of 15½ cents per hour.

(2) With respect to the application of this increase to the train dispatchers and the railroad yardmasters, the increase shall be multiplied by 240 hr. per month to determine the amount of the monthly increase.

(3) The effective date of this award shall be September 1, 1947.

The award was signed by Dr. William M. Leiserson, of Washington, D. C., former chairman of the National Labor Relations Board and the National Mediation Board, and Dr. Robert D. Calkins, of New York, vice-president and director of the General Education Board, New York, the two "public" members of the board, and by George M. Harrison, president of the Brotherhood of Railway & Steamship Clerks, Freight Handlers, Express & Station Employees, and George Wright, vice-president of the National Brotherhood of Firemen, Oilers, Roundhouse & Railway Shop Laborers, the board members representing the employees. Henry A. Scandrett, former president of the Chicago, Milwaukee, St. Paul & Pacific, and J. Carter Fort, vice-president of the Association of American Railroads, the members representing the carriers, dissented and declined to sign the award. Speaking for Mr. Fort and himself, Mr. Scandrett told *Railway Age* that "It is our opinion that the award is excessive in the light of the evidence."

Not Retroactive

The carriers estimate that the award, which will affect the wages of approximately 947,000 non-operating employees, will cost them $438 million annually. Had the full 20 cents been granted, the cost would have amounted to $566 million. While the 15½ cents per hour granted by the board to the employees represents 77.5 per cent of their original demand, the carriers gained a point in that the award was made retroactive by only one day—to September 1—whereas the employees had asked the board to render its award retroactive fully to April 25. The board apparently recognized the plea of the carriers that whatever award might be granted be not retroactive, in consideration of their absolute inability to offset or overcome the effects of back payments by retroactive rate increases.

The 17 non-operating unions first served their request for a 20-cent hourly increase upon the carriers on March 25, 1947. Negotiations were then pursued on the individual properties, and resulted in unanimous denial of the demands. A national conference committee representing the 17 unions and carriers' conference committees representing the railroads were then authorized to handle the dispute to a conclusion. Negotiations between these committees commenced June 18, and on June 26 the services of the National Mediation Board were invoked. When it was clear that no settlement could be reached through mediation, both parties to the dispute agreed on July 25 to submit their case to an arbitration board to hand down a decision which would be binding.

Hearings before this board produced a record which filled 3,252 pages and included some 38 exhibits. Chairman Leiserson remarked to the board: "You have heard the very able and eloquent statements from both sides and one says we can't do justice without giving all that is asked, and the other makes plain that we can't do justice by giving anything. You can see the kind of a job that we have, to find what is justice or what is right, either ethically or economically."

The board's liberal award is currently observed to have induced speculation in carrier circles as to the possibility of the operating employees withdrawing their 44 rule change demands and substituting therefor a straight hourly wage increase. In any event, a meeting of op leaders has been called, according to statements originating with the Brotherhood of Railroad Trainmen, and there are indications that an increase in rates of pay will be "demanded." Meanwhile the railroads were expected, as this issue went to press, to apply promptly for authority to increase their rates, over and above the increase proposed in the Ex Parte 166 proceedings, by an amount sufficient to offset the wage rise won by the non-ops.

COMMUNICATIONS . . .

Railroads Should Broadcast Railway Facts

LOS ANGELES, CAL.

TO THE EDITOR:

Just a comment or two on the editorial on railway results in 1929 and 1947 which appeared in the *Railway Age* of August 2:

Every president or general manager in charge of any rail line should copy this write-up, reprint it on heavy paper in large letters, and post it in every office on his lines, from the operating department down to the maintenance of way, in every yard office, section tool house, shop, roundhouse—wherever any individual employee may see it and read it—and then enclose a copy with each payroll check.

I think it is a must to enlighten each employee that, with the present continuance of government subsidization of all competitive forms of transportation, it is time for all employees to speak up if they are interested in their jobs.

OLIVER OLSON

[EDITOR'S NOTE: Mr. Olson was formerly general manager of the Rapid City, Black Hills & Western, and is a member of American Association of Railroad Superintendents, American Railway Engineering Association and Transportation Association of America. The editorial to which he referred was entitled "Earnings, 1929 and 1947," and compared railway results in the first five months of these two years.]

Naturals

NEW YORK

TO THE EDITOR:

The letter in the July 19 *Railway Age* by Philip E. Buchert interests me for the reason that he is a "railroad enthusiast"—a railfan. Although I have not had any personal talks with him I believe I know something about how his mind works, for there are several of our boys like him.

Most railfans are more or less content with their non-railroad jobs, but do like the railroads—like to see them, to ride on them, to hear them—and they are railroad boosters. There is a smaller group, however, of men whose love for railroads goes deeper. Some of them are railroad employees, some are students, some are not satisfied with their present employment or are unemployed. They think and talk and sleep railroading and have since early childhood—their whole being is railroads.

There is something enormously fascinating about railroading—the action, the movement of the nation's goods and people, the power of a great locomotive, the mystery as to what makes a railroad operate, the many phases of this great industry.

The general public thinks we are plain nuts, I suppose, and cannot understand why we are not interested in horse racing, baseball, or the like. People who are connected with the railroads, including those who do the hiring, do not understand us either, I am afraid. To many of them their work is just a job; they can't imagine why anyone should be "nuts" about railroads.

I don't suppose that Mr. Buchert volunteered the information that he is a so-called railfan and that railroading is a part of his very heart. There are many fans and I believe the railroads are missing some good material when they turn down any of them who apply for work. These men really want to be a part of railroads, they are not just looking for a job—they want a *railroad* job, by choice. Many of them are going to make good at it if given a chance.

A. T. KNOWLES
Program Chairman,
Railroad Enthusiasts, Inc.

Prompt Unloading Will Help Car Supply

NIAGARA FALLS, N. Y.

TO THE EDITOR:

Experience with a small railroad, which averages 7,200 loaded cars per month, prompts me to take exception to portions of Mr. Webber's article in your issue of July 1. I know Mr. Webber will take in good part the sincerely constructive criticism of one whose experience has ranged from brakeman to general superintendent.

Regarding the 5-day in place of a 6-day week for industry, I will go half-way and suggest a 5-day week for loading and a 6-day week for unloading. This would be more economical to both industry and railroads.

Demurrage, as everyone knows, is money thrown away—wasted. Industry pays it, the railroad receives it, but pays it out through congestion and per diem. For example: Saturday mornings our yard and industrial tracks are practically clear, yet by Monday night our yard is filled to capacity. On Mondays industries will order all the cars their tracks will hold and, naturally, we are late in spotting due to the switching involved. Tuesday is practically the same since we have to remove from industry *some* of the cars placed Monday night and fill their tracks again. From Wednesday on we are in good condition and can give the industries the service they wish. The overtime wages on Mondays and Tuesdays take a good deal of our demurrage and the per diem takes most of the remainder.

An apparent solution is to put on more crews Monday and Tuesday. The fact is our yard is so constructed that to do so would decrease efficiency. In other words, the plants were built around the railroad and not vice versa. I think in most industrial districts the same condition exists.

Regarding the two half-mile tracks of empty cars lying long enough last summer for rust to appear on rails, cited by Mr. Webber, it is difficult to understand this, in view of the way the A.A.R. operated in this locality and the way one industry checked on the other. The industry Mr. Webber mentions must have been an isolated one.

I think Mr. Webber knows whereof he writes in the case of half carloads of resin moving where full carloads could have been moving by expending $5 to $7 for labor per car. Where was the O.D.T. while this was going on?

I agree fully with the last paragraph of Mr. Webber's article that the only way to have industry load and unload promptly (emphasis on unload), is to make it advantageous to them. The only way to do this is by placing a high penalty for each day over the free time, making allowances for troublesome loads.

In my experience most delays are in the unloading of cars. This, I think, is due to bunching by the railroads or buying in bulk when the market is down. Our average detention of outbound loads is 1.68 days, while the average detention of inbound loads is 3.97 days. This check is only on a few days out of the last three months, but in my estimation is a true picture.

Put all possible effort on securing prompt unloading and I think we will have empty cars to spare.

T. P. REDDING
General Superintendent
Niagara Junction

Car Numbers Should Have a Meaning

SAN FRANCISCO, CAL.

TO THE EDITOR:

The railroads and private car lines in this country own freight cars of all types—box and automobile cars, gondolas, tank cars, flat cars, refrigerators, etc.

Most railroad employees would have to refer to the Railway Equipment Register to learn, for example, that car number 4181 belonging to the Santa Fe is a fifty foot automobile car, or that the car of the same number (4181) belonging to the Baltimore & Ohio is a hopper, and the same number (4181) of Union Pacific ownership is a tank car and so on, the number being assigned to a different type car on other lines.

Why should not this number indicate one particular type of car regardless who may be the owner?

It is often as important to know what kind of a car we are dealing with as it is to know who owns it. It is true that various reports show the type of car by alphabetical designation, as "R" (refrigerator), "B" (box), "F" (flat), etc., but what is needed often is further information on length, dimensions, or special type of cars.

Consider also the millions of times that the letters indicating the type of car have to be shown on wheel reports, yard checks, on-hand reports, interchange reports, etc.—operations which would not be necessary under the proposed plan. Another important item is the time, often of high-salaried personnel, required to look up kind or type of some particular car which would be generally known to practically everyone if the proposed suggestion had been put into effect years ago. However, it was not, still is not and, never will be unless it is started; so let's start now for the benefit of having this information in later years, since it would take a long time to get all

cars of the various owners in full accord with the series plan.

The proposed plan would work as follows: Sufficient numbers would be set aside to cover all units of each of the types of cars owned by any railroad or car line; naturally the largest number of cars of one ownership would determine how many numbers would be needed for assignment to one series and those lines with fewer cars of the same type would use as many numbers as were needed within each series.

Briefly, it would work out somewhat as follows:

Tank Cars, series numbers	0 to 50,000
Refrigerators, series numbers..	60,000 to 99,000
Flats, series numbers	100,000 to 111,000
Gondolas, series numbers	120,000 to 220,000
Hoppers, series numbers	230,000 to 260,000
Box, series numbers	300,000 to 400,000
Automobile, series numbers ...	500,000 to 550,000
Stock, series numbers	600,000 to 625,000

There then should be a further breakdown by particular types, length, etc.—such as all coiled tanks in certain groups within the overall series for tank cars; all "RSM" type refrigerator cars designated in the 60,000 series; all "RB" type refrigerators in the 70,000 series; and "RS" type refrigerators in the 80,000 and 90,000 series, for example.

In addition to the above, there could be a further classification within the box car series, showing 40 ft. and 50 ft. cars separately within the 300,000-to-400,000 series and likewise with others. Device and parts cars perhaps might have certain numbers set aside for them within the 500,000-to-550,000 series.

This suggestion represents the personal conviction of the writer, but he is of the opinion that its adoption by the railroads would result in savings to them through more efficient work by all who have to deal with car numbers.

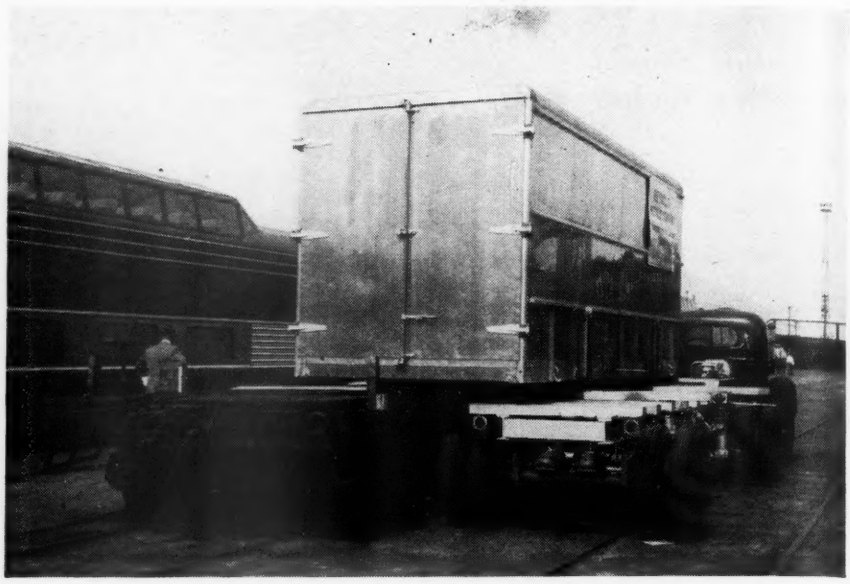
W. M. FOSTER
Asst. Supt. Transportation
Western Pacific

New Aluminum Container for L.C.L.

An aluminum freight container which may be readily transferred from a conventional highway trailer, fitted with power take-off hydraulic controls and jacks, to a standard railroad flat car, has been developed by the Reynolds Metals Company, Richmond, Va. Each container unit has inside length, width and height of 9 ft. 7½ in., 7 ft., and 6 ft. 8½ in., respectively. The light weight of the unit is 3,000 lb., while its capacity is 20,000 lb., or 790 cu. ft.

Two sets of hydraulic systems, one hand operated and built into the container itself, and the other on the truck trailer, powered by a power take-off-driven pump, make possible speedy transfer from trailer to freight car. The hydraulic system in the container is used to extend two 5-wheel carriages below the plane of the bottom of the container unit so that it can be easily moved laterally from the trailer to a flat car, or vice versa. Hydraulic rams on the trailer elevate the container tracks on the trailer to the level of the plane of the top of the flat car to compensate for any slope of ground away from the railroad tracks. By raising the two rams on the side away from the freight car, the container rolls into position with ease.

To transfer a loaded container from a flat car to a trailer, a winch on the tractor chassis and a hinged sheave block, which can be swung out and locked into a position at 90 deg. in relation to the length of the trailer, are used to pull the load back off the car. When the container unit is empty, it can be transferred manually through its self-contained, hand-operated hydraulic system. While loaded, and in transit on either a flat car or trailer, the container rests on its own base, relieving the hydraulic system of any load. Two containers can be carried on a standard 46-ft. flat car.



A Reynolds aluminum container being transferred from truck trailer to flat car

Dust Guard Made of Rubber and Steel

The Pat-Shan dust guard combines the rigidity of steel with the flexibility and sealing qualities of synthetic rubber. This construction is attained by taking a suitably shaped piece of hot-rolled 16-gage steel and molding to it, with the aid of 31 holes drilled in the steel, molten Hy-Car synthetic rubber. The rubber, which is abrasive-, oil- and heat-resistant, forms, for practical purposes, a single piece with a metal insert.

This product of R. J. Shanahan & Co., 80 East Jackson boulevard, Chicago 4, has four narrow rubber strips projecting outward from the front and back parallel to and extending completely around the edges of the guard. The two sets of strips are similar except that those on the front are more blunt. With the movement of the guard sideways or up and down in the well, these strips act to seal in the lubricant and to exclude dirt, grit, water, and miscellaneous foreign matter.

The dust guard is graphite impregnated. Application is made by inserting the guard into the well and pushing the axle through the opening.

The Pat-Shan dust guard is made of synthetic rubber molded on a 16-gauge-steel insert

GENERAL NEWS

I.C.C. Asks Return of M. P. Revamp Plan

Tells court that revisions may be required because of changed conditions

The Interstate Commerce Commission has recommended to the United States Circuit Court of Appeals for the Eighth Circuit that the plan which the commission has approved for reorganization of the Missouri Pacific under section 77 of the Bankruptcy Act be returned to it "for further hearing and reconsideration and such revision as it may find to be appropriate." The recommendation was embodied in a brief which the commission filed recently at the request of the court where appeals from the district court's endorsement of the commission-approved plan are pending.

The brief noted at the outset that it was being filed in response to the circuit court's request that the commission, "if so advised," state its views "respecting the issues raised by the appeals." It also noted that the commission has in the past "consistently refrained from volunteering its views on new or changed conditions" which arose after reorganization plans approved by it had been referred to the courts. "At such point in the proceedings," the brief went on, "it [the commission] has felt that the question whether conditions have so changed as to require resubmission of the plan to the commission for revision is primarily one for the district court before which the facts may be presented and the matter argued."

Congress Was Critical—This failure of the commission to take the initiative and recall reorganization plans, which had been approved by it, has brought the regulatory body much criticism from members of Congress. The criticism has come from proponents of legislation to set up procedures for non-bankruptcy readjustment of railroad financial structures, which would be available to railroads which went into the hands of the courts during the depression of the Thirties. During the recent session of Congress, the Senate committee on interstate and foreign commerce recommended passage of such legislation (Senate bill 249) in a report which asserted that the present administration of section 77 was "a kind of Alphonse and Gaston act, the courts and the commission having been bowing to each other and saying 'you first' on the question of revision of plans."

The M. P. reorganization plan as it was previously approved has been submitted by the commission for acceptance or rejection by holders of claims entitled to vote. That submission was pursuant to the commission's June 20 order which requires returns of ballots on or before September 19 by persons in continental United States and not later than October 6 by persons outside that area. The circuit court has suggested that the results of the balloting be brought to its attention for "whatever effect" they might have on the appeals.

Impressed by Cash—The commission's brief recalled that when it approved the reorganization plan now being voted upon it considered the effect thereon of the redemption for cash of $10,352,400 in principal amount of St. Louis, Iron Mountain & Southern first mortgage bonds; but concluded that the new company's securities thus released should not be distributed to other creditors. The brief went on to say, however, that subsequent cash payments of that kind have totaled an additional $46,380,500. Moreover, "large" additional amounts of accrued and delinquent interest have been paid; "extensive expenditures" have been made for improvement of the property; and operations in recent years have resulted in "large accumulations of cash" in the treasuries of the debtor companies. All of which seems to have convinced the commission that it should take another look at the plan.

"While the plan is sufficiently elastic to permit of adjustment for a reasonable amount of debt retirement and interest payment, it is questionable whether the possibility of the large retirements and expenditures and further cash accumulations which have occurred were contemplated," the brief said. It added that "whether provisions of the plan should be interpreted as permitting the acquisition of claims for the benefit of other classes of creditors may be doubted."

The brief then went on to say that adjustment of the plan "to meet present conditions" will involve "several major problems." It listed first the question of determining whether the securities released through debt retirements and acquisitions of claims should be redistributed to other creditors or cancelled. It also referred to what the commission now considers the desirability of reviewing other provisions of the plan, including those relating to the reorganization managers and the first board of directors of the new company.

In the latter connection, the brief had this to say:

"The holdings of present securities of some of the parties entitled under the plan to nominate appointees probably have materially decreased from their original holdings, notably in the case of the institutional group of holders of Missouri Pacific first and refunding bonds. In the case of the Reconstruction Finance Corporation, whose loan has been satisfied, there will be an initial failure of appointment."

Adequate Earnings Await Higher Rates

Buford will tell I.C.C. there is no other way to offset increasing costs

Identifying the "immediate and pressing" railroad problem as that arising from "lack of adequate earnings" in this period of high traffic volume, Charles H. Buford, president of the Chicago, Milwaukee. St. Paul & Pacific, will testify at the ExParte 166 rate-increase hearing that the situation can only be remedied by increasing the price of the transportation service which the railroads sell. Mr. Buford's presentation, like those of other prospective railroad witnesses, was submitted to the Interstate Commerce Commission in advance of the hearing, which is scheduled to open before the commission's Division 2 at Washington, D. C., on September 9.

Effect of Wage Increase—As reported in the *Railway Age* of August 30, page 49, where the presentations of other railroad executives were reviewed, the commission required the advance submissions by its July 24 order in the proceeding which involves the carriers' petition for authority to make general freight-rate increases of 25 per cent within Official territory and interterritorially between that territory and other territories, and 15 per cent within and between Southern and Western territories. There are various exceptions, so the proposal as a whole would increase freight rates throughout the country by an average of approximately 17 per cent. When this issue went to press it was expected that an amended petition seeking higher increases might be filed soon in view of the fact that the original petition did not take into consideration the wage increase granted this week to nonoperating employees by an arbitration board.

Mr. Buford's conviction that higher rates will provide the only remedy for the existing low-earnings situation was based, he said, on his "general knowledge of railroading, and, particularly, my experience as vice-president of the Association of American Railroads." Mr. Buford served in that position for 6½ years which embraced the war period.

He conceded that the needs of different roads will vary, but stated that there was sufficient similiarity to justify his use of the Milwaukee's situation to demonstrate the needs of other carriers in the western district. He contrasted the 1946 earning record of his road with that of 1929, pointing out that he had selected for comparison

Indian government representatives led by M. Asaf Ali, ambassador to the United States (third from right), beside "The Spirit of New India," first of 16 streamline locomotives to be built for the railways of India by the Baldwin Locomotive Works. On the ambassador's right is Ralph Kelly, president of Baldwin. The ambassador christened the engine at a ceremony on August 11, at the Baldwin plant, Eddystone, Pa. (See August 16 *Railway Age*, page 71.)

* * *

years when there was "no lack of traffic," the volume being such that a railroad "should expect to earn adequate sums for all purposes."

Figures presented by Mr. Buford showed that in 1929 the Milwaukee had a net railway operating income of $26,274,000, a return of 4.09 per cent, and a net income "in excess of $7,000,000." In 1946, when its revenue ton-miles were 22 per cent greater, its net railway operating income was $13,347,000, a return of 1.95 per cent, and its net income was "slightly in excess of $3,000,000." The latter would have been a deficit, except for an income tax credit of $4,618,368. And Mr. Buford later said that his road's 1948 deficit would be about $6,000,000—"assuming continuation of present price and wage levels and without a rate increase."

Costs Outrun Revenues—Mr. Buford also noted the drop in Milwaukee revenue per ton-mile, from 1.048 cents in 1929 to 0.97 cents in 1946, and the decline from 2.93 cents to 1.78 cents in revenue per passenger-mile. "The comparisons," he went on, "conclusively demonstrate that the price of our service has not kept pace with our continually increasing costs of doing business. Wages and payroll taxes . . . have nearly doubled during the period 1929 to 1946. Materials and supplies . . . have greatly increased in price. These increased wages and prices without corresponding increases in the rates for their services have left the railroads with their credit threatened and the continued improvement in the efficiency of their properties greatly handicapped."

As to the Milwaukee's improvement plans, Mr. Buford referred to its $88,000,000 equipment program which increasing labor and material costs threaten to make a $100,000,000 program; a track program expected to involve an outlay of $19,000,000; and other proposed projects estimated to cost more than $22,000,000. The latter includes $2,192,700 to comply with the commission's recent order requiring additional signaling and train-control or cab-signal installations on high-speed lines.

In closing, Mr. Buford called attention to the importance to mid-western roads of revenues for the transportation of farm and animal products, and asked that such products be given no exceptional treatment. In this connection, he recalled that in previous general rate cases the commission has limited the increases on farm and animal products to lesser amounts than those authorized on commodities generally.

Why Favor Agriculture?—"If there were justification for that favorable treatment in the rates in the past, there certainly can be no justification for it at this time," Mr. Buford continued. "Those products can surely now bear an equal part of the increased transportation costs. Many of the products of the farm have reached new all-time price peaks this year. . . . These increases in the value of these commodities warrant substantial increases in the freight rates. The railroads are performing a more valuable service and are accepting a greatly increased liability. To illustrate, in transporting a carload of wheat in 1940, the railroad was moving property valued at about $1,500, while today the same carload of wheat is worth in excess of $4,000. Loss or damage to a car of wheat today means large damage claims."

A group of 29 freight forwarders has been permitted by the commission to intervene in the proceeding. In their petition the forwarders stated that they will seek authority to increase their rates by the same amounts or percentages as the commission may approve with respect to railroad rates.

The railroad petition was the subject of a radio discussion on the "America United" program, broadcast from Washington over the National Broadcasting Company's network on the afternoon of August 31. Participants were Dr. Julius H. Parmelee, vice-president of the A. A. R. and director of its Bureau of Railway Economics; Colonel Alvin B. Barber, manager, Transportation and Communication Department, U. S. Chamber of Commerce; Boris Shiskin, chief economist, American Federation of Labor; and Fred Bailey of the National Grange.

Some Contrary Opinions—Dr. Parmelee opened the discussion with a brief outline of the railroad proposal, and Mr. Shiskin countered with comment on costs of distribution in this country, and then stated it to be his "impression," from the "facts I know," that "the justification for a 25 per cent rail increase at this time is not warranted."

Colonel Barber spoke of the chamber's feeling that the railroads are "entitled to fair earnings," but added that "many different factors" must be taken into account in applying that principle. How-

ever, the chamber believes that the case is in "good hands" (the I. C. C.), and that "all will have opportunity to be heard." Mr. Bailey saw no evidence that rate increases of recent years resulted in more efficient railroad operations, so he was "not going to say that giving them another increase is the answer to getting a better railroad system at all."

Here Dr. Parmelee came forward with figures showing the greatly increased costs which the railroads have had to pay while their rates have risen by much smaller percentages. As he put it, the carriers are trying to extricate themselves from the present lack of balance in their cost-price relationships. Mr. Shiskin objected to the percentage figures, so Dr. Parmelee supplied other comparisons. And he told Mr. Bailey that he would consider 6 per cent a "fair return" on railroad property. Dr. Parmelee conceded to the grange representative that 6 per cent is "way out of line" with rates on government bonds and bank interest rates; but he insisted that the railroads "must have, in addition to a fair return for their interest and dividend charges, net earnings sufficient to make the necessary improvements in their properties."

When Mr. Bailey insisted that he didn't believe "it takes 6 per cent to attract the capital needed into the railroads," Colonel Barber indicated it to be his understanding that relatively little new capital has gone into the railroad industry in recent years. Whereupon Mr. Shiskin went into the past to mention land grants as part of the capital which went into the industry. He was told by Dr. Parmelee that the amount of such aids was "totally insignificant," and "shouldn't be mentioned in a discussion of this character, because it simply tends to becloud the issue."

Mr. Shiskin's Mistake—When the question of railroad efficiency came up again, Colonel Barber told Mr. Bailey that his observation of European roads prompted him to say that "our railroads are just marvelous in their efficiency." Colonel Barber said later that he believes the demand is "more for improved service than for greater economy" in railroad operations. He added that business generally is less concerned about the absolute level of freight rates than it is about the relationship between rates.

In his further comment Mr. Shiskin said that he was "perfectly willing" to have all parties "rest their faith" on the I. C. C., but he was "worried" about the attitude of the railroads toward the forthcoming hearing. His worry was based on the fact that advice to "take the rate case to the public" had been received by the railroads from *Railway Age*, "their publication." Dr. Parmelee promptly advised Mr. Shiskin that *Railway Age* "is not a railway publication—it's an entirely independent journal." The labor economist was referring to the July 12 issue's leading editorial.

G. M. & O. Fined $2,000

The Interstate Commerce Commission has been advised by the federal district court at Jackson, Miss., that the Gulf, Mobile & Ohio was fined $2,000 on June 24 on a plea of *nolo contendere* to an information charging it with having violated Section 1 of the Elkins Act. The information charged that the G. M. & O., in connection with five carload shipments handled by it during 1945 at Jackson, unlawfully made delivery of the shipments without first obtaining possession of the "order" bills of lading, as required by Rule 7 of the Consolidated Freight Classification.

Landslide on Milwaukee Tracks

A landslide on August 30 hampered transcontinental train service of the Chicago, Milwaukee, St. Paul & Pacific and the Northern Pacific about six miles east of Cle Elum, Wash. The slide took out more than 1,000 ft. of Milwaukee line, necessitating the detour of passenger trains via the Great Northern from Seattle, Wash., to Spokane and freight trains via the N. P. from Easton to Spokane. A shoo-fly constructed by the railroad was scheduled to go into service September 4. The regular line is expected to be out of service for 30 days or more. Service of the N. P. was reported interrupted for about eight hours by inundated tracks caused by an overflow of water from the Yakima river which was dammed by the slide.

Collision on Canadian National

A Canadian National 13-coach resort special, westbound from Minaki, Ont., was in a headon collision with the standing "Continental Limited" shortly after 11 p.m. on September 1 as the latter was discharging passengers at Dugald, Man., on the main line 14 miles east of Winnipeg, killing at least 27 persons and injuring 15 others. Two of the nine wooden coaches of the special burst into flames which spread to other coaches and wayside structures. Passengers on the regular train suffered only minor injuries. This train and other passenger trains were rerouted via Sprague, Man., until the line was restored to service September 2.

Harriman Safety Medals Awarded

The E. H. Harriman Memorial Gold Medal for the best safety record in 1946 among the larger railroads of the country has been awarded to the Union Pacific, Wallace J. Falvey, president of the American Museum of Safety, has announced. A silver medal has been awarded to the Western Maryland and a bronze medal to the Colorado & Wyoming for leadership in safety among the railroads in their respective classes. The E. H. Harriman Memorial Medals, which were instituted in 1913 by the late Mrs. Mary W. Harriman, in memory of her husband, Edward H. Harriman, have been awarded heretofore 27 times by the American Museum of Safety.

The medals will be presented by Robert V. Fletcher, special counsel of the Association of American Railroads and chairman of the museum's award committee, at a dinner to be held at the Hotel Ambassador, New York, on September 17. Mr. Falvey will preside. William T. Faricy, president of the A.A.R., will deliver the principal address, entitled: "Freedom and Safety Ride the Rails." Many railroad presidents and prominent industrial leaders will be present. During the evening Donald B. Armstrong, chairman of the Arthur Williams Memorial award committee, will present the Arthur Williams Memorial Medal to Thomas H. MacDonald, commissioner, Public Roads Administration, Federal Works Agency, "for his untiring devotion to the development of a safe and efficient American highway system."

The gold medal will be accepted by G. F. Ashby, president of the Union Pacific, the silver medal by Charles W. Brown, president of the Western Maryland, and the bronze medal by Ward Wire, vice-president of the Colorado & Wyoming. The awards are determined on the basis of the official records of the Interstate Commerce Commission for the year 1946, the railroads being ranked in their several groups according to their individual safety ratings.

Mountain-Pacific Area Rate Cut Asked by Washington State

The state of Washington has filed with the Interstate Commerce Commission a complaint alleging that present railroad class rates result in unreasonable discrimination against Mountain-Pacific territory and asking that the commission require an extension to that territory of the 10 per cent reduction recently made in Southern, Southwestern, and Western Trunk Line territories. Those reductions, accompanied by a 10 per cent increase in Official-territory rates, were made pursuant to the commission's interim order in the No. 28300 class-rate case, which did not embrace the Mountain-Pacific area.

The commission's order was issued May 15, 1945, but appeals to the courts delayed establishment of the interim adjustment until the 23rd of last month. As noted in the *Railway Age* of July 12, page 89, the commission ordered it established at that time in a report which set forth the plan for harmonizing it with the general Ex Parte 162 freight-rate increase which had meanwhile become effective. Rates in Mountain-Pacific territory were not affected by this harmonizing plan, and thus the item in the July 12 issue was in error when it stated that class rates there would go up 2½ per cent.

The commission's report in No. 28300 embraced also the No. 28310 investigation of the Consolidated Classification. The interim rate adjustment was a preliminary step which the railroads were required to take while they proceed to carry out the decision's permanent plan calling for the establishment of a uniform classification to apply throughout the country and a completely revised scale of class rates to apply (like the interim adjustment) in all territories except Mountain Pacific.

Washington state's position, as set forth in the complaint, is that Mountain-Pacific rates were just as discriminatory as were those of Southern, Southwestern and Western Trunk Line territories when the interim adjustment was ordered in those territories; and that the interim adjustment creates "an additional factor of discrimination." The complaint also said that "this discrimination seriously hampers the growth of Mountain-Pacific territory and the state of Washington in particular as an industrial area and discourages the estab-

lishment within such area of new enterprises which are dependent upon commerce and trade."

N. I. T. League Protests Express Rate Increase Proposal

The National Industrial Traffic League has asked the Interstate Commerce Commission to reject the proposed report on further hearing which has been made by C. G. Jensen, director of the commission's Bureau of Traffic, in the Ex-Parte 163, express-rate case. The Jensen report, noted in the *Railway Age* of August 16, page 67, favors the Railway Express Agency's proposal which would yield about $70 million a year in additional revenues.

The N. I. T. L., in urging the commission to deny the request of the R. E. A. for such further relief, contends that the commission's previous order in the proceeding, which authorized temporary increases calculated to produce $58,900,000 in additional revenues for a one-year period starting last December 13, should remain in effect, and that the rates published thereunder should continue in force temporarily for another six months with the requirement of submission of a "proper permanent" proposal.

"The recitals of the report plainly indicate that the only justification attempted by . . . the Railway Express Agency for the proposed rates is that they will afford increased revenues needed to increase the express privilege payments to the railroads," the N. I. T. L. said. "The report states that there is no evidence with respect to the propriety of the proposed rates, save their revenue effects. The conclusions embody requirements that after another six months the applicant shall present a new proposal of a proper uniform single scale for national application. The necessary implication is that the scales now proposed are not justified."

Tourist Cars Off U. P. Soon

No tourist sleeping cars will be in operation on the Union Pacific after October 1, G. F. Ashby, president of the railroad, announced last week. In keeping with the railroad's announcement last March to replace such cars with modern equipment, tourist sleepers will be taken off the San Francisco "Challenger", into and out of Oakland, Cal., effective with the last cars leaving terminals September 30, Mr. Ashby said.

A. A. R. Signal Section Meets in Chicago Next Week

Increased safety and efficiency of railroad operations through improved signaling equipment and techniques will be discussed at the 49th annual three-day meeting of the Signal Section of the Association of American Railroads opening at the Edgewater Beach Hotel in Chicago on September 11. Approximately 700 railroad signal officers from all parts of the United States and Canada are expected to attend.

Topping the list of speakers are John W. Barriger, president of the Chicago, Indianapolis & Louisville, J. H. Aydelott, vice-president in charge of the Operations and Maintenance Department of the Association of American Railroads, and Mayor Martin H. Kennelly, of Chicago.

Papers on improved railroad signaling will be read by C. S. Bushnell, chief engineer of the General Railway Signal Company, and G. W. Baughman, chief engineer of the Union Switch & Signal Co. What has been going on in the field of railroad signaling during the past year will be reviewed in reports by the chairmen of the various committtees. L. B. Porter, chairman of the Signal Section and superintendent of telegraph and signals of the Chicago, Milwaukee, St. Paul & Pacific, will preside over the sessions.

Knoxville, Tenn., Gets Eastern Standard Time

The Interstate Commerce Commission has modified its outstanding orders defining standard time zones to include within the eastern zone the entire states of Virginia and North Carolina and additional portions of eastern Kentucky and Tennessee, including Knoxville, Tenn. The decision by Division 2 was embodied in the twenty-seventh supplemental report in the Standard Time Zone Investigation— No. 10122.

Principal proponents of the modifications were the Knoxville Chamber of Commerce and Knoxville Junior Chamber of Commerce, the commission having reopened the proceeding for further hearing after receiving a petition from those organizations. The order prescribing the relocated boundary line also follows through to make necessary revisions in exceptions applicable to certain railroad operations in the border territory.

Young Said to Seek Control of A. A. R. Through N. Y. C.

Robert R. Young will resign from the chairmanships of the Chesapeake & Ohio and the Allegheny Corporation in order to continue his fight for "control" of the New York Central if the Interstate Commerce Commission denies his request for authority to serve as a New York Central director, according to an interview with Mr. Young reported in the Cleveland News. Mr. Young was quoted as saying that when the "Morgan banks" invited him to join the New York Central board they apparently figured they would be powerful enough behind the scenes to have the I.C.C. block him, although he does not think the commission will do that. If his request is denied, he will resign and continue his struggle in the financial market, it was indicated.

Mr. Young was reported to have said it would not be difficult to get other stockholders behind him in a move to "control" that road. After winning control of the New York Central, Mr. Young said, his group would be able to influence the affairs of the Pullman Company and to exercise some "control" of the Association of American Railroads.

Modification of Signaling Order Sought by Western Pacific

The Western Pacific this week was added to the list of railroads which are seeking modification of the Interstate Commerce Commission's order of June 17 in the Docket No. 29543 proceeding, wherein the commission has required the carriers to install automatic train-stop or train-control systems, cab signal systems, or automatic block signals on lines over which high-speed trains are run. Other petitions for modification of the order were outlined in *Railway Age* of August 23, page 52, and previous issues.

The W. P. seeks modification of the order to permit it to operate one train daily at an authorized speed of 80 m.p.h. or more over approximately 291 miles of its 924.5-mile Salt Lake City, Utah-Oakland, Cal., line, all of which is protected by automatic block signals. The same train, the "California Zephyr," would be operated at speeds of less than 80 m.p.h. over the remaining portion of the line. Maximum authorized speed on the W. P. now is 70 m.p.h. for passenger trains and 50 m.p.h. for freight trains. At the same time, the W. P. said that if it is required to install automatic cab signals, such installments should be made solely within the cabs of those locomotives to be operated at a speed of 80 m.p.h. or more.

The W. P. would also have the commission define medium speed as "a speed not exceeding one-half authorized speed, but not exceeding 30 m.p.h., except that in districts where maximum speed is 35 m.p.h. or less, medium speed shall not exceed 20 m.p.h."

Stettinius Quits F. R. P. Advisory Committee

Edward R. Stettinius, Jr., has resigned as chairman of the advisory committee of the Federation for Railway Progress because of a development in his personal business affairs. In making his resignation known, Mr. Stettinius said, "It is with reluctance that I am compelled to withdraw from the work which the advisory committee . . . is doing. This organization, in less than a year, has done much to re-awaken interest in progressive railroading in this country to the ultimate benefit of the traveling and shipping public."

Loading Order Date Changed

The Interstate Commerce Commission has postponed from September 2 to September 30 the effective date of its recent order which vacates the suspension of tariffs whereby the railroads propose to increase their charges for loading and unloading carload freight at various points in Official territory. The vacating order accompanied the commission's report in I. & S. No. 5466 which was noted in the *Railway Age* of August 30, page 58.

Forest Research Group to Meet

The first national meeting of the Forest Products Research Society will be held at the Furniture Club of America in the Furniture Mart, Chicago, on October 31 and November 1. The program will include the presentation of a wide variety of papers during three separate panel sessions: (1) chemical utilization of wood; (2) engineering aspects of wood use; and (3) seasoning and preservation.

Thomas R. C. Wilson, consulting timber engineer and former chief of the U. S. Forest Products Laboratory division of timber mechanics, has been appointed secretary-treasurer of the society, in charge of its permanent office in Madison, Wis. He succeeds William J. Baker, who has joined the staff of the Oregon Forest Products Laboratory at Corvallis, Ore.

Defer Action on Proposed G.M.&O.-Frisco Merger

Action on the proposed merger of the Gulf, Mobile & Ohio and the St. Louis-San Francisco (reported in *Railway Age* of August 9) will be deferred "until more information is forthcoming from the G. M. & O. management," it was announced by the Frisco last week following a meeting of its board of directors at St. Louis, Mo. This announcement stated that the original proposal was made by the G. M. & O., and that the Frisco desired data "to substantiate contentions of appreciable benefits to Frisco security-holders."

RR Car Ferry Jobless as "Mop" Takes the Bridge Route

The passing of the railroad passenger car ferry from Missouri Pacific operations was marked on September 2 when the "George H. Walker" made its last trip across the Mississippi river at Baton Rouge, La. M. P. trains will now use the rail-highway bridge spanning the river at that point, saving as much as an hour in transit. The ferry will be sold, the road stated.

The "Walker," at one time the largest steel hull on the Mississippi and its tributaries, has logged nearly a half million miles in almost 25 years of service. Its mileage, except for a maiden voyage from the launching ways of the Dravo Corporation yard in Pittsburgh, Pa., to Baton Rouge and one round trip to New Orleans, La., has been amassed in approximately 20 round trips daily over the one-and-a-quarter mile course between North Baton Rouge and Anchorage, La., on the west bank of the river. With a capacity on its three tracks of 11 passenger cars or 20 freight cars, the ferry transferred four M. P. passenger trains and many freight trains across the river daily.

Department of Commerce Drops "Domestic Commerce"

The Department of Commerce has announced discontinuance of its monthly magazine, "Domestic Commerce," effective with the September issue. The Department stated that the magazine was being dropped because recent budgetary cutbacks required it to eliminate less essential publications and to earmark available funds for "more specialized" studies.

I. C. C. Postpones Hearing Dates in C. & D. Investigation

The Interstate Commerce Commission has postponed until dates to be fixed in the future hearings in its investigation into the lawfulness of allowances paid by the railroads, truckers and freight forwarders to persons performing pick-up and delivery service or transporting l.c.l. and less-than-truckload freight between stations at Kansas City, Mo.-Kan.; Minneapolis, Minn., and St. Paul; and Seattle, Wash., and Portland, Ore. The schedule of hearings now canceled was noted in *Railway Age* of July 12, page 90.

Report Heavy Labor Day Travel

With only scattered instances of standees on passenger trains, the railroads operating out of Chicago reported Labor Day travel generally on about the same level as a year ago. All roads operated extra equipment on regular trains and many lines operated extra sections on August 29 and September 1. The Pennsylvania and New York Central operated sections of their all-coach "Trailblazer" and "Pacemaker" trains on Friday, Saturday and Monday. The Chicago, Indianapolis & Louisville reported travel nearly double that of the same period a year ago, with its new streamliners, the "Hoosier" and "Tippecanoe," carrying extra coaches and loaded to capacity. The Illinois Central estimated Labor Day week-end travel in and out of Chicago 5 to 10 per cent heavier than a year ago. Other roads reported traffic abou the same or slightly less than the same three-day week-end of 1946.

Equally heavy travel was reported by railroads in the East. The Pennsylvania operated 151 extra sections into and out of New York to accommodate Labor Day travel. The New York, New Haven & Hartford ran 79 extra holiday sections, which constituted a Labor Day record for that road. Other roads had to press into service practically all available equipment. Travel in and out of New York was augmented by the return of children from summer camps and by homegoing American Legion members.

Freight Car Loadings

Carloading figures for the week ended August 30 were not available when this issue went to press.

Loadings of revenue freight for the week ended August 23 totaled 900,895 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, August 23

District	1947	1946	1945
Eastern	157,811	163,675	151,512
Allegheny	187,115	191,874	174,768
Pocahontas	72,128	70,858	62,713
Southern	129,801	132,484	121,957
Northwestern	143,217	129,463	140,554
Central Western	141,703	133,171	135,159
Southwestern	69,120	63,430	66,763
Total Western Districts	354,040	326,064	342,476
Total All Roads	900,895	884,955	853,426
Commodities:			
Grain and grain products	58,016	46,481	66,768
Livestock	12,135	15,719	16,457
Coal	177,377	183,957	180,264
Coke	14,039	14,143	11,725
Forest products	49,276	52,243	42,625
Ore	78,127	63,369	75,251
Merchandise l.c.l.	115,514	120,322	105,523
Miscellaneous	396,411	388,721	354,813
August 23	900,895	884,955	853,426
August 16	906,305	887,553	652,832
August 9	905,244	899,086	870,002
August 2	921,591	898,391	863,910
July 26	919,928	910,513	886,430
Cumulative total, 34 weeks	28,580,422	25,992,713	27,898,000

In Canada.—Car loadings for the week ended August 23 totaled 76,607 cars as compared with 73,728 cars for the previous week and 73,469 cars for the corresponding week last year according to the compilation of the Dominion of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
August 23, 1947	76,607	35,949
August 24, 1946	73,469	34,563
Cumulative totals for Canada:		
August 23, 1947	2,477,849	1,242,549
August 24, 1946	2,283,468	1,153,792

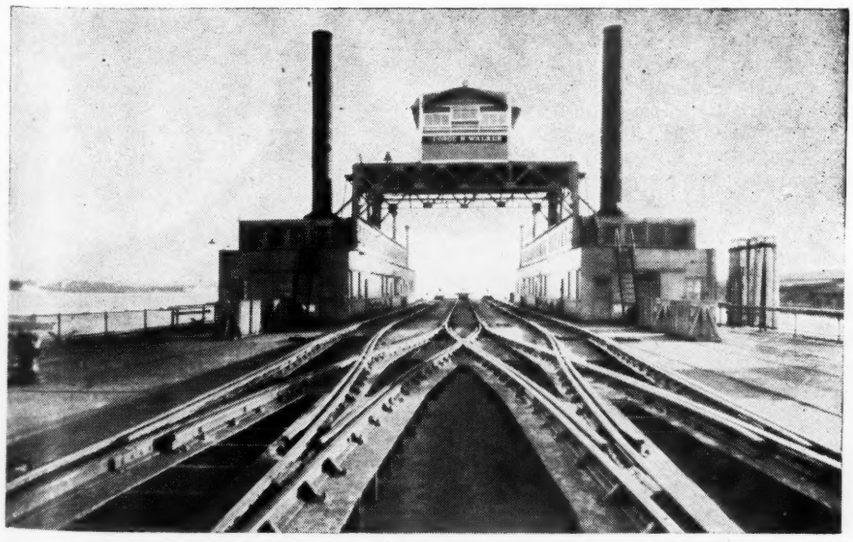


Photo courtesy Dravo Corporation

The ferry, built by the Dravo Corporation of Pittsburgh, Pa., has traveled an estimated seven times around the world during its nearly quarter of century of operations on the 1¼ mi. run across the Mississippi.

Additional general news appears on page 90, while a list of current publications may be found on page 94.

Equipment and Supplies

Domestic Equipment Orders Reported in August

Domestic orders for 36 Diesel-electric locomotives and 11,664 freight cars were reported in *Railway Age* in August. No passenger car orders were reported. The estimated cost of the locomotives is $7,880,000 and the freight cars will cost an estimated $45,489,600. The accompanying table lists the orders in detail.

During the first eight months of this year, *Railway Age* has reported domestic orders for 374 Diesel-electric, 1 gas-turbine, 4 electric and 10 steam locomotives (costing an estimated $79,240,000), 69,665 freight cars (at an estimated cost of $271,663,600), and 275 passenger cars (the estimated cost of which is $22,737,000).

LOCOMOTIVES

Date	Purchaser	No.	Type	Builder
August 2	D. L. & W.	3	4,500-hp. D.-E. pass.	Electro-Motive
		1	4,500-hp.-D.-E. frt.	Electro-Motive
		6	3,000-hp. D.-E. frt.	Electro-Motive
August 2	Long Island	5	660-hp. D.-E. sw.	Baldwin
August 2	N. Y. C. & St. L.	11	2,000-hp. D.-E. pass.	American
August 16	U. P.	5	1,500-hp. D.-E.	Fairbanks, Morse
		5	2,000-hp D.-E.	Fairbanks, Morse

FREIGHT CARS

August 2	N. Y. C.	1,000	55-ton Box	Pullman-Standard
August 9	Armour & Co.	1,000	40-ton Refrig.	General American
		1,000	40-ton Refrig.	American Car & Fdy.
August 9	C. M. St. P. & P.	1,000	50-ton Hopper	Pressed Steel
August 9	N. Y. N. H. & H.	1,000	50-ton Box	Pullman-Standard
August 9	North. States Power Co.	4	70-ton Hopper	American Car & Fdy.
August 9	Reading	1,000	50-ton Box	American Car & Fdy.
August 9	U. P.	1,600	50-ton Box	Pullman-Standard
August 16	C. & O.	1,000	70-ton Cov. Hopper	American Car & Fdy.
August 16	C. & E. I.	200	50-ton Box	American Car & Fdy.
August 16	C. & I. M.	350	70-ton Gondola	Pullman-Standard
August 16	G. M. & O.	50	70-ton Cov. Hopper	American Car & Fdy.
August 16	Peoples Gas, Light & Coke	10	Hopper	Pullman-Standard
August 16	Tenn. Central	100	50-ton Hopper	American Car & Fdy.
August 16	Union Tank Car	2,000	10,000-g. Tank	American Car & Fdy.
August 23	C. I. & L.	300	50-ton Gondola	Pullman-Standard
		50	70-ton Gondola	Greenville

Frisco to Spend $10 Million More for New Equipment

The purchase of an additional $10,393,686 in new equipment—authorized on August 29 by the board of directors of the St. Louis-San Francisco—will result in the "greatest" modernization program in that railroad's history, Clark Hungerford, Frisco president, announced last week. The road will buy 19 Diesel-electric road freight and switching locomotives, 1,300 freight cars and other operating facilities, bringing the Frisco's total expenditures in its present mprovement program to more than $17,000,000. Mr. Hungerford said the new locomotives would give the road two through Diesel-powered freight trains between St. Louis, Mo., and Texas and two between Kansas City, Mo., and Birmingham, Ala. They will "go far" toward completely Dieselizing through freight service on a number of the road's divisions.

LOCOMOTIVES

The ERIE is inquiring for 10 1,000-hp. and 1 660-hp. Diesel-electric switching locomotives.

FREIGHT CARS

The DELAWARE, LACKAWANNA & WESTERN has ordered 500 50-ton box cars from the American Car & Foundry Co. Delivery is scheduled to begin during the first quarter of 1948.

The ERIE is inquiring for 1,000 50-ton hopper cars, 700 50-ton box cars and 100 70-ton covered hopper cars.

The COLUMBIA STEEL COMPANY is inquiring for 45 70-ton gondola cars.

SIGNALING

The CHICAGO & NORTH WESTERN has ordered materials from the General Railway Signal Company for the installation of Type K, two-wire centralized traffic control on 70.5 mi. of double track between West Chicago, Ill., and Nelson. The control machine, to be located in Chicago, will have a 138-in. panel equipped with 95 track indication lights, an automatic tran recorder, and 67 levers for the control of 63 switch machines, 5 switch locks and 200 signals. Both tracks will be signaled for operation in either direction. Type SA searchlight signals, Type K relays, Model 10 electric switch locks, and Model 5D dual-control electric switch machines will be used in the installation.

The READING has placed an order with the Union Switch & Signal Co. for the signaling material for a temporary interlocking required for the control of a temporary track layout incidental to the rebuilding of the Vine street bridge located within the limits of "RA" electro-pneumatic interlocking, Reading Terminal, Philadelphia. The railroad will employ a Style C machine for the temporary interlocking, the order including necessary relays, rectifiers, lightout relays, time releases, A-5 electro-pneumatic switch movements with Style CP valves and searchlight type dwarf signals. The regular signal construction forces of the railroad will do the field construction work.

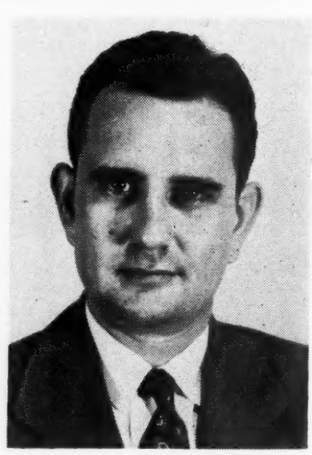
Supply Trade

Henry V. Bootes, formerly sales agent for the **American Car & Foundry Co.,** has been appointed district sales manager, New York sales district, with headquarters

Henry V. Bootes

as before in New York. Before joining American Car & Foundry, Mr. Bootes was district manager of the Ohio Injector Company and during world war II he served as a major in the United States Marine Corps.

Harry E. Weiler has been appointed manager of the Louisville, Ky., district sales office of the **Reynolds Metals Company,** serving all of Kentucky except Kenton and Campbell counties. The office also covers southern Indiana. Mr. Weiler was graduated from the Georgia School of Technology with a B.S. degree in engineering, following which he did graduate work at Northwestern University and the Illinois Institute of Technology. He later worked successively for the Tennessee Eastman Corporation, the Enterprise Wheel and Car Corp., and the Revere Copper & Brass Co. Mr. Weiler joined Reynolds Metals as assistant to the general product manager at Louisville and later advanced to product manager of the extrusion and tubing division.



Harry E. Weiler

The **Weatherhead Company** has announced the appointments of **A. F. Spring** to the newly-created position of export manager, with headquarters at Cleveland, Ohio, and **William L. Hauck** as eastern district sales manager, with headquarters at New York. Mr. Spring was formerly head of the Continental Trading Corporation of Cleveland and Mr. Hauck was formerly district sales manager for the Scaife Company.

Edmund C. Gootee, formerly with the Babcock Lumber Company, has been appointed eastern representative of the **R. D. Walker Lumber Company,** Mobile, Ala., to handle the railroad, industrial, car material and retail yard business. Until permanent headquarters can be obtained in the Philadelphia, Pa., metropolitan area, Mr. Gootee will operate from 29 Runnemede avenue, Lansdowne, Pa.

The **American Steel & Wire Co.** has announced the following personnel changes in the sales department of its Cyclone Fence division: **E. Kyndberg,** formerly district sales manager of the Waukegan, Ill., office, has been appointed general sales manager of the division, with the same headquarters; **J. F. Boyce,** formerly sales manager of the southeastern district, has been appointed district sales manager at Waukegan; **R. W. Ewart,** who has been serving in a sales capacity in Cleveland, Ohio, Buffalo, N. Y., and Savannah, Ga., has been appointed sales manager of the southeastern district, with headquarters at Savannah, and **J. D. Filer,** who has been working as a salesman in the Newark, N. J., office, has been promoted to assistant district sales manager of the eastern district, with the same headquarters.

B. E. Wurtmann, vice-president of the Manheim Manufacturing & Belting Co., has been appointed manufacturer's agent for eastern railroads by the **K. W. Battery Company,** Chicago, to handle railway sales of car lighting and air conditioning batteries. Mr. Wurtmann will continue to handle Manheim Manufacturing & Belting products as heretofore.

Gerard V. Vaupotic has been appointed sales representative of the **Pantasote Company** of New Jersey, to succeed the late **H. H. Horn.**

Alfred Marchev, formerly president and chairman of the board of the Republic Aviation Corporation, has been elected president and general manager of the **Aircraft Screw Products Company** of Long Island City, N. Y.

Edgar J. Reichenbach has been appointed manager, specialties and machinery division of the general sales department of the **United States Steel Supply Company** (a subsidiary of the United States Steel Corporation), with headquarters at Chicago. Since 1937 he has served as salesman in the Chicago district sales department.

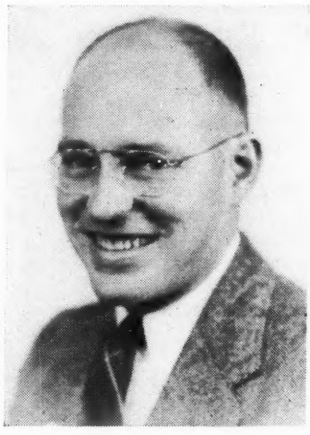
O. L. Howland has been appointed sales manager of the welding division of the **Metal & Thermit Corp.,** with headquarters in Chicago. Mr. Howland was graduated from the University of Wisconsin after which he began his business career with a surveying party of the Phelps-Dodge Corporation in Mexico. During World War I he served in the merchant marine, immediately after which he joined

O. L. Howland

the Central Steel & Wire Co. of Chicago, as a welding specialist. In 1924 he joined the Lincoln Electric Company as a district manager in Indianapolis, Ind., and two years later returned to Central Steel & Wire. From 1927 to 1931 he was general manager of the Koro Corporation. In 1932, he was appointed eastern manager for the Hollup Corporation and, in 1936, sales manager at the Chicago office. Mr. Howland headed the War Production Board's welding division in Washington, D. C., during the recent war.

The appointment of **William C. Cuntz** as assistant sales manager of the welding division, with headquarters at Pittsburgh, Pa., also was announced.

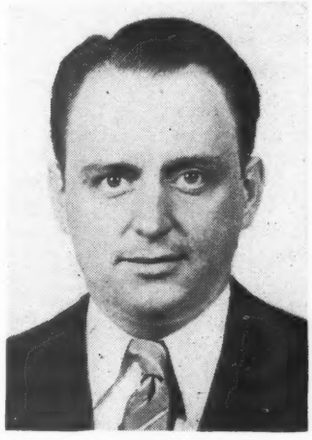
John W. Milliken has been appointed purchases and stores editor of *Railway Age,* succeeding **Fred W. Smith,** who becomes a sales representative in the Chicago area for the Simmons-Boardman Publishing Corp. Mr. Milliken was born in Verona, Pa., on April 19, 1916, and was graduated from



John W. Milliken

Dartmouth College in 1938. During the summers while at school he worked as a section hand on the Pennsylvania. After graduation he worked in the road's maintenance of way department at Chicago until April, 1939, when he came to New York, where he held various positions in the stations and transfers department. While in New York, he also did special duty in the freight and passenger transportation departments. He joined the army in November, 1940, and was released, as a captain of engineers, in February, 1946. In the course of his military duty he served as a section foreman and supervisor's clerk on the Claiborne & Polk Military Railway. Since his release from the army, Mr. Milliken has won a master's degree in history from Bucknell University.

Roy E. McCluskey, formerly assistant treasurer of **R. G. LeTourneau, Inc.,** has been advanced to vice-president in charge of sales. Mr. McCluskey, who joined LeTourneau in 1941, will direct the



Roy E. McCluskey

company's sales divisions and other related departments. The resignations of **Oscar W. Nelson** as vice-president and general manager of the Peoria, Ill., division and **Robert F. Nelson** as vice-president and assistant to the president, also were announced. Mr. Robert Nelson will continue as a member of the board of directors, a position he has filled since March, 1944.

OBITUARY

Maurice Hooff, general production manager of the Hyster Company, died on August 22, at Portland, Ore. He was 47 years old.

Howard J. Snowden, a member of the sales staff of the Baldwin Locomotive Works, died on August 22.

Car Service

The Office of Defense Transportation has issued General Permit ODT-18A, Revised—13A, effective September 3, which authorizes the loading of not less than 20,000 lb. of sweet potatoes when originating in Maryland or Virginia and destined to any place east of a line consisting of the eastern boundary of Minnesota and the Mississippi river south to New Orleans, La. Prior minimum loading requirement on this traffic was 28,000 lb. The permit expires November 30.

Overseas

Foreign Railroad Rates Raised

Freight and passenger railroad rates abroad are following the general inflationary pattern, according to a survey by the United States Department of Commerce. Since January charges have been increased in Great Britain, France, Finland, Spain, Turkey, Cuba, Colombia, Mexico, Costa Rica, Brazil, Peru, Chile, Bolivia, China, French Indo-China and Japan. In Canada a decision will soon be made on the application by the railroads for a 30 per cent increase in freight rates and in Argentina there are indications that increases are in the offing.

The extent of the increases varies from country to country, but the increases are most substantial where currency values have dropped most. In France, Finland, Turkey, Japan, Cuba and Mexico almost all roads are affected. In Costa Rica, the increase affected only the Pacific Railway, in Spain only the 41 privately-owned narrow gage lines, and in Peru only the Central. The reasons for the increases are the climbing costs of equipment, material, supplies and labor.

GREAT BRITAIN.—The London & North Eastern, with the approval of the Minister of Transport, will resume work on the electrification of its Manchester-Sheffield main line. The project, involving a total of 75 route miles or 300 track miles, including sidings, will cost approximately £6,000,000, take four years to finish and save about 100,000 tons of coal yearly. An overhead line conductor system, using direct current at 1,500 volts, will be used in the project, work on which was suspended in September, 1939, when the war began.

Construction

A. C. L. Authorized to Construct Line in Disputed Florida Area

A dispute arising from applications filed with the Interstate Commerce Commission by the Atlantic Coast Line and the Florida East Coast for authority to construct and operate separate lines in the general territory south of Lake Okeechobee, Fla., appeared to be settled this week when the commission approved in part the proposal submitted by the former and denied the application of the F. E. C. The commission found that the A. C. L.'s proposed line would lend greater aid in the development of the Everglades area for the reason that it would extend through a territory almost wholly undeveloped, whereas much of the territory which the proposed F. E. C. line would have served has been "fully developed."

The commission's order authorizes the A. C. L. to construct and operate a branch line extending from a connection with its so-called Lake Harbor branch at a point about 4 miles west of Lake Harbor to a point in the Everglades about 8.5 miles directly south of that connection, thence easterly, about 7.5 miles, to the site of the sugar-mill operations of the Okeelanta Growers & Processors Cooperative. As proposed in the application, the line would have extended about 2 miles beyond the mill to a point on State Highway No. 25, but the commission ruled against such extension.

The F. E. C. line would have extended from a connection with its so-called Okeechobee branch at a point about 2 miles east of South Bay Station to a point in the Everglades about 8 miles south of that connection, and thence westerly, about 4 miles, across Highway No. 25 to the same mill. The approved A. C. L. line resembles the letter "L" while that proposed by the F. E. C. resembles the same letter reversed, converging on the mill from the west and east, respectively.

The commission pointed out that the A. C. L. line appears to be designed for no purpose other than to serve the sugar mill at Okeelanta and to handle agricultural produce, including sugar cane, from land owned or controlled largely by the United States Sugar Corporation, which operates a Clewiston, Fla., mill, also served by the A. C. L. The ruling against extension of the line 2 miles beyond the Okeelanta mill was based on the commission's appraisal of evidence which indicated that such extension was intended largely for the accommodation of that mill in reaching its sugar cane in that locality. It saw no reason why a railroad should be constructed to handle that product in view of evidence showing that so-called Athey wagons could be utilized for that purpose.

The commission's findings differ from those recommended by Examiner J. S. Prichard, as reported in *Railway Age* of April 26, page 873. He advised the commission to authorize the A. C. L. and F. E. C. to jointly construct, operate and maintain one line in lieu of the two proposed, adding that unless the two roads agreed to such a proposal the commission should deny both applications.

The commission's report noted that the Seaboard Air Line and Southern, among others, intervened in support of the F. E. C. proposal and in opposition to the A. C. L. These carriers, it was explained, favored the F. E. C. construction because all the new traffic would have to be interchanged at Jacksonville, thus affording an opportunity for all connecting carriers, including the A. C. L., to participate in the movement of traffic beyond Jacksonville.

Commenting on the commission's decision, C. McD. Davis, president of the Coast Line, recalled that the commission earlier this year modified its approved plan of reorganization for the F. E. C. so as to place it under control of the A. C. L. He expressed the view that the court will approve the A. C. L.-F. E. C. merger, which, he added, will not affect the construction by the A. C. L. of the line here involved.

SEABOARD AIR LINE.—This road has awarded the following contracts, the approximate costs of which are shown in parentheses: To the Virginia Bridge Company, Roanoke, Va., for steel bridge spans to be used at Camden, S. C. ($112,000); to the Thorington Construction Company, Richmond, Va., for work at Richmond involving paving and an extension to certain inspection pits ($28,000); to Biemann & Rowell, Raliegh, N. C., for improving steam facilities at Hamlet, N. C. ($36,000); to Albert Haworth, Tampa, Fla., for additions to the Winter Haven, Fla., freight station which will provide passenger facilities ($58,000); to R. H. Lowe, Inc., Roanoke, for improving steam facilities at the Portsmouth, Va., station and general office building ($34,000); to Sultenfuss & Scott, Tampa, for a wash and locker building in Tampa ($21,000); to the Elliott Building Company, Hickory, N. C., for a storehouse and a wash and locker room at Hamlet ($33,000); and to the Hodges Contracting Company, Albany, Ga., for a freight station and paving at Albany ($33,000).

SOUTHERN.—This company has authorized the following projects by its own forces, at the probable costs shown in parentheses: Filling a trestle near Marietta, Ala., ($33,900); replacing a timber trestle with a reinforced concrete trestle near Tuscaloosa, Ala., ($20,000); erecting a new overhead highway bridge at Mead, Ga., ($21,000); and constructing a track layout to serve the Southern Aggregates Corporation at Stokesland, Va., ($29,785).

Financial

BALTIMORE & OHIO.—*Equipment Trust Certificates.*—This company has sold $5,600,000 of series V equipment trust certificates to the Mellon National Bank & Trust Co. and associates, on a bid of 99.07189 for an annual interest rate of 2 per cent. (See *Railway Age* of August 23, page 340).

GULF, MOBILE & OHIO.—*Control of Leased Lines.*—This company has applied to the Interstate Commerce Commission for authority to acquire further control of the Joliet & Chicago and the Louisiana & Missouri River, both of which it now operates under lease. The applicant, which proposes no changes in operation of the two lines, told the commission that such operations could be carried on "more efficiently and more economically" if the two roads were parts of the G. M. & O. system, and that cancellation of the leases would produce net annual savings of approximately $51,357.

To finance the transaction, the applicant seeks authority to issue $2,736,000 of Series B first and refunding mortgage 4 per cent bonds, due in 1975, and it would, meanwhile, cancel a like amount of Series C 5 per cent bonds, now held in its treasury. It would acquire the outstanding 14,950 shares, par value $100 per share, of J. & C. capital stock, and the outstanding 3,290 shares of L. & M. R. 7 per cent guaranteed preferred stock, now in the hands of the public, by exchanging for each such share $150 principal amount of the Series B bonds.

MISSOURI PACIFIC.—*Claim Against New Orleans, Texas & Mexico Upheld.*—The United States circuit court of appeals at St. Louis, Mo., has upheld the decision of the federal district court there allowing a claim of the M. P. against the N. O. T. & M., its subsidiary, for more than $10,000,000, plus accrued interest. Objections to the claim had been filed by representatives of holders of 5¼ per cent convertible bonds secured by N. O. T. & M. stock, the value of which is affected by allowance of the claim. The higher court held that the M. P. was justified in its claim against the N. O. T. & M. for advances for expansion and operating expenses.

MISSOURI PACIFIC.—*Plan of Reorganization.*—Division 4 of the Interstate Commerce Commission has deferred its decision on the applications of two groups for authority to serve as protective committees for holders of Missouri Pacific 5¼ per cent secured serial gold bonds and for authority, pursuant to section 77(p) of the Bankruptcy Act, to solicit authorizations to represent the holders of such bonds.

The commission concluded that it should retain jurisdiction and defer decision on the applications of the committees until a final decision by the courts on the pending appeals from the order of the district court approving the plan. It said that upon a decision by the courts, the committees may, if they so desire, file with the commission a motion for further consideration of their applications.

The commission also has denied, without prejudice, the petition filed by John V. Farwell, III, Bolton Sullivan and Donald D. Wilson, independent directors of the M. P., to intervene in the reorganization proceedings. The commission said that because there has been no final determination by the appellate courts of the question of the return of the plan to the commission for review there are no proceedings now before it on a plan of reorganization for the M. P.

SOUTHERN PACIFIC.—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this company to assume liability for $11,400,000 of Series V equipment trust certificates, the proceeds of which will be applied toward the acquisition of 3,600 freight cars, at an estimated cost of $15,266,286, as outlined in *Railway Age* of August 2, page 62. The certificates will mature in 10 equal annual installments starting August 1, 1948. The report also approves a selling price of 99.76 with a 2 per cent interest rate, the bid of the First National Bank of New York and associates, on which basis the average annual cost will be approximately 2.05 per cent.

Average Prices Stocks and Bonds

	Sept. 2	Last week	Last year
Average price of 20 representative railway stocks	49.14	47.87	52.36
Average price of 20 representative railway bonds	89.63	89.24	94.66

Dividends Declared

Atlanta & Charlotte Air Line. — $4.50, semi-annually, payable September 1 to holders of record August 20.

Beech Creek.—50¢, quarterly, payable October 1 to holders of record September 10.

Boston & Albany.—$2.00, payable September 30 to holders of record August 30.

Pittsburgh, Bessemer & Lake Erie. — common, 75¢, semi-annually; 6% preferred, $1.50, semi-annually, both payable October 1 to holders of record September 15.

Pittsburgh, Fort Wayne & Chicago. — common, $1.75, quarterly, payable October 1 to holders of record September 10; 7% preferred, $1.75, quarterly, payable October 7 to holders of record September 10.

Reading. — 4% 2nd preferred, 50¢, quarterly, payable October 9 to holders of record September 18.

Organizations

A meeting of the **Central Railway Club of Buffalo, N. Y.,** will be held on September 16 at 8:00 p.m., in the Niagara Room of the Hotel Statler. John W. Barriger, president of the Chicago, Indianapolis & Louisville will be the guest speaker. His subject is "The Year of Decision—1948."

The **Southwest Shippers Advisory Board** will hold its 76th regular meeting in Little Rock, Ark., on September 25 and 26 at the Hotel Marion. Col. J. Monroe Johnson, director, Office of Defense Transportation, will address the luncheon session and the rest of the program will be devoted to committee reports and a report on general transportation conditions by R. E. Clark, manager, Car Service Division, Association of American Railroads.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

ALLIED RAILWAY SUPPLY ASSOCIATION. — C. F. Weil, American Brake Shoe Company, 332 S. Michigan Ave., Chicago 4, Ill. Exhibit in conjunction with meetings of the Coordinated Mechanical Associations, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, October 9-10,1947, Rice Hotel, Houston, Tex.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 8-10, 1948, Hotel Stevens, Chicago, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, 1103 Cleveland St., Evanston, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 16-18, 1947, Hotel Stevens, Chicago.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION. —W. J. Walsh, B. & O. R. R., Baltimore 1, Md. Annual meeting, April 5-7, 1948, Hotel Roosevelt, New Orleans, La.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.— Works in cooperation with the Association of American Railroads, Engineering Division.— W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 16-18, 1948, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—Clifford G. Massoth, Illinois Central Magazine, 135 E. 11th Pl., Chicago 5, Ill.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.— J. P. Nye, Tower Bldg., Washington 5, D. C. Annual meeting, October 21-22, 1947, Hotel New Yorker, New York, N. Y.

AMERICAN SOCIETY FOR TESTING MATERIALS.— R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. —C. E. Davies, 29 W. 39th St., New York 18, N. Y. Annual meeting, December 1-5, 1947, Chalfonte-Haddon Hall, Atlantic City, N. J.
Railroad Division.—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago 3, Ill.

AMERICAN TRANSIT ASSOCIATION.—A. W. Baker, 292 Madison Ave., New York 17, N. Y.

AMERICAN WOOD-PRESERVERS' ASSOCIATION. — H. L. Dawson, 1427 Eye St., N. W., Washington 5, D. C. Annual meeting, April 27-29, 1948, St. Paul, Minn.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.— R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C. of C. Bldg., Cincinnati 2, O. Annual meeting, October 6-8, 1947, Lord Baltimore Hotel, Baltimore, Md.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, October 7-9, 1947, Claridge Hotel, Atlantic City, N. J.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.
Operations and Maintenance Department.— J. H. Aydelott, Vice-president, Transportation Bldg., Washington 6, D. C.
Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.
Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.
Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.
Communications Section.—W. A. Fairbanks, 30 Vesey St., New York 7, N. Y. Annual meeting, October 21-23, 1947, Roney Plaza Hotel, Miami Beach, Fla.
Fire Protection and Insurance Section. —W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York 17, N. Y. Annual meeting, October 21-22, 1947, Chicago, Ill.
Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.
Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.
Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.
Safety Section. — J. C. Caviston, 30 Vesey St., New York 7, N. Y.
Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.
Construction and Maintenance Section. —W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 16-18, 1948, Palmer House, Chicago, Ill.
Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 30, 1947, Hotel Sherman, Chicago, Ill.
Signal Section—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 11-13, 1947, Edgewater Beach Hotel, Chicago, Ill.
Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill.
Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 1-2, 1947, Hotel Sherman, Chicago, Ill.
Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C.
Freight Claim Division.—Lewis Pilcher, (Executive Vice-Chairman), 59 E. Van Buren St., Chicago 5, Ill.
Motor Transport Division.—Transportation Bldg., Washington 6, D. C.
Car Service Division.—W. C. Kendall, Chairman, Transportation Bldg., Washington 6, D. C.
Finance Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.
Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.
Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October 8-10, 1947, New Ocean House, Swampscott, Mass.
Traffic Department.—A. F. Cleveland, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Gulf, Mobile & Ohio R. R., 340 W. Harrison St., Chicago 7, Ill. Annual meeting, May 19-21, 1948, French Lick Springs Hotel, French Lick, Ind.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill. Exhibit in conjunction with American Railway Bridge and Building Association Convention, September 15-18, 1947, Hotel Stevens, Chicago, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.— J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—W. E. Angier, chief A. A. R. clerk, C. B. & Q. R. R., 547 W. Jackson Blvd., Chicago 6, Ill. Regular meetings, second Monday of each month, except June, July and August, Union Station, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, 1840-42 Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

CHICAGO LUNCHEON CLUB OF MILITARY RAILWAY SERVICE VETERANS. — Col. R. O. Jensen, Schiller Park, Ill. Luncheon, second Wednesday of each month, Chicago Traffic Club, Palmer House, Chicago, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS. —H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION. — W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker Street, North Little Rock, Ark. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

MASTER BOILER MAKERS' ASSOCIATION — A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y. Annual meeting September 15-18, 1947, Hotel Sherman, Chicago, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, November, 1948, Savannah, Ga.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS. — F. J. Armstrong, United States Radiator Corporation, United Artists Bldg., Detroit, Mich. Annual meeting, October 27-28, 1947, Jefferson Hotel, St. Louis, Mo.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C. Annual meeting, November 20-21, 1947, Palmer House, Chicago, Ill.

NATIONAL RAILWAY APPLIANCES ASSOCIATION. — C. H. White, Room 1826, 208 S. La Salle St., Chicago 4, Ill. Meeting and exhibit in connection with A. R. E. A. Convention, March 15-18, 1948, Amphitheatre, Chicago, Ill.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston 11, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB. — D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION. — E. N. Myers, Minnesota Transfer Ry., 1434 Iowa Ave., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB. — William S. Wollner, P. O. Box 458, San Rafael, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill. Annual dinner, November, 1947, Hotel Stevens, Chicago, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION. — J. McC. Price, Allen-Bradley Company, 624 W. Adams St., Chicago 6, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago 4, Ill. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION. —A. W. Brown, Room 1424, 30 Church St., New York 7, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section, of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meeting, September 23-25, 1947, Arlington Hotel, Hot Springs, Ark.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 16-18, 1947, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A. A. R. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS. —D. W. Brantley, C. of Ga., Savannah, Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q. and C. Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in conjunction with Roadmasters' and Maintenance of Way Association Convention, September 15-18, 1947, Hotel Stevens, Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill. Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.

Railway Officers

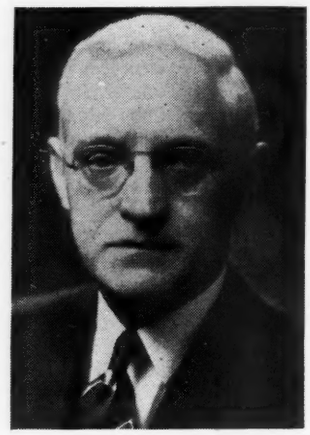
EXECUTIVE

W. G. Peoples, whose appointment as assistant vice-president, system freight traffic, of the Southern Pacific, with headquarters at San Francisco, Cal., was reported in *Railway Age* of August 23, was born at Opp, Ala., on September 26, 1899. He entered railroad service in 1916 as a stenographer-clerk in the general freight office of the Louisville & Nashville, and served in various clerical capacities until 1920, when he entered the service of the Southern Pacific as a traveling agent at

W. G. Peoples

Birmingham, Ala. In 1925 he became traveling freight and passenger agent at Atlanta, Ga., and in 1937 he was appointed general agent at that point. On June 1, 1938, Mr. Peoples was named assistant to the general traffic manager at Chicago, and on June 15, 1941, he was promoted to assistant general traffic manager, with the same headquarters. One year later he was advanced to freight traffic manager at New York, whence in July, 1943, he was transferred to San Francisco, where he remains in his new capacity as assistant vice-president.

J. J. Brinkworth, whose promotion to system vice-president of the New York Central, with headquarters at Chicago, was reported in *Railway Age* of August 23, was born at Buffalo, N. Y., on July 3, 1887, and entered railway service with the New York Central as yard clerk at East Buffalo, N. Y., on August 23, 1902. On May 1, 1909, he was advanced to chief clerk to



J. J. Brinkworth

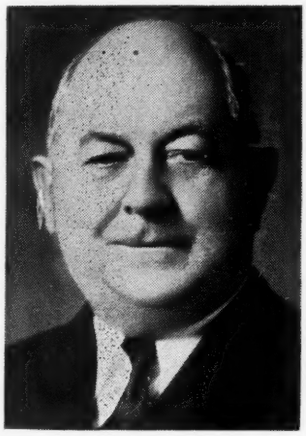
the superintendent at Buffalo, and three years later he was promoted to assistant trainmaster, with the same headquarters. He subsequently served as trainmaster of the Buffalo division until 1924, when he was advanced to assistant superintendent, with headquarters at Weehawken, N. J. On April 1, 1926, Mr. Brinkworth was promoted to superintendent of the Ohio division, and in 1930 he was transferred to Buffalo. From 1931 to 1937 he served as assistant superintendent at Buffalo and in the latter year he was advanced to superintendent of the New York Terminal district and River division, with headquarters at New York. Mr. Brinkworth was promoted to assistant general manager, Lines East of Buffalo, in 1941, and in 1944 became vice-president and general manager of the N. Y. C.'s Big Four district at Cincinnati, Ohio. He was serving in the latter capacity at the time of his new promotion.

Edward P. Snyder, chief clerk in the office of the vice-president of finance of the Baltimore & Ohio, has been appointed assistant to vice-president, finance, with headquarters at Baltimore, Md. Mr. Snyder was born at Baltimore and attended the public schools there, graduating in law from the University of Baltimore. He entered the service of the Baltimore & Ohio as clerk in the freight claim department in 1919 and in 1923 was transferred to the office of the senior vice-president. Mr. Snyder became chief clerk in the office of the vice-president of finance in 1945.

H. C. Parse, whose appointment as assistant to the president of the Pittsburg & Shawmut at Kittanning, Pa., was reported in *Railway Age* of June 14, was born at Trenton, N. J., on April 19, 1903. After a private and public school education, Mr. Parse entered the service of the Pennsylvania in 1922 in the stores department of the New Jersey division. He subsequently served in the transportation department at Pittsburgh, Pa., and in the

coal traffic department there, becoming coal freight representative. In November, 1939, Mr. Parse resigned to enter private business. In February, 1946, he returned to railroad service as general freight agent of the Pittsburg & Shawmut, being appointed industrial agent of the New York, Chicago & St. Louis at Cleveland in October, 1946. He held this position at the time of his recent appointment as assistant to president of the Pittsburg & Shawmut.

J. L. McKee, whose promotion to vice-president-assistant to the president, New York Central System, with headquarters at Chicago, was reported in *Railway Age* of August 23, was born at Constantine, Mich., on June 8, 1881, and entered railway service in 1900 with the Atchison, Topeka & Santa Fe, serving for brief periods as express messenger and chainman. In November, 1901, he became yard billman of the Lake Shore & Michigan Southern (now New York Central) at Elkhart, Ind. Subsequently he was freight brakeman, switch tender, switchman and assistant yardmaster, becoming general yardmaster of the same road at Windsor, Ont., in 1910. After serving as trainmaster and division superintendent, he went with the Delaware, Lackawanna & Western in September, 1917, as superintendent at Buf-



J. L. McKee

falo, N. Y. The following year he was appointed assistant general superintendent of the Michigan Central at Detroit, Mich., and was named successively general superintendent and assistant general manager of that road at Detroit. In May, 1932, Mr. McKee was promoted to assistant vice-president of the New York Central at Chicago, and he became assistant vice-president and general manager in October, 1937. In December, 1943, he was promoted again, to the post of vice-president and general manager with jurisdiction over the Michigan Central. Mr. McKee became vice-president of the N. Y. C. System, with headquarters at Chicago, in August, 1944, which position he held at the time of his recent appointment.

George H. Baillie, whose promotion to vice-president of the Pacific region of the Canadian Pacific, with headquarters at Vancouver, B. C., was reported in *Railway Age* of August 23, was born at St. Lambert, Que., on July 1, 1901, entered railroad service on April 22, 1918, with the Canadian Pacific, and served in various minor positions until January 1, 1930, when he was promoted to assistant to the general superintendent at Vancouver, B. C. On December 4, 1934, he became assistant

George H. Baillie

superintendent at Lethbridge, Alta., being transferred to Wynyard, Sask., on January 1, 1935, and serving there until July 1, 1937, when he was promoted to superintendent at Vancouver. Mr. Baillie was transferred to Revelstoke, B. C., on October 9, 1941. On November 1, 1942, he was further advanced to general superintendent at Calgary, Alta., and on May 1, 1944, he returned to Vancouver as general superintendent. Mr. Baillie was promoted to general manager, Western Lines, at Winnipeg, Man., in January, 1946, and was serving in that position at the time of his new appointment.

A. M. Hand, whose appointment as assistant to the vice-president of the eastern region of the Canadian Pacific at Toronto, Ont., was reported in *Railway Age* of August 30, began his railway career in 1923 in the law department of the Canadian Pacific at Montreal, Que. The following year he transferred to the general super-

A. M. Hand

intendent's office at Toronto, becoming assistant superintendent of the Laurentian division in 1942. Mr. Hand went to the Toronto Terminals in 1944 and was serving as superintendent of that railway at the time of his recent appointment as assistant to the vice-president of the eastern region of the Canadian Pacific.

FINANCIAL, LEGAL AND ACCOUNTING

William J. Butler, whose appointment as general counsel of the Pullman Company, at Chicago, was reported in *Railway Age* of August 16, was born at Ottawa, Ill., on November 9, 1889, and was graduated in law by Georgetown University in 1915. He has been admitted to practice in the state and federal courts of Illinois, in the District of Columbia, and before the Interstate Commerce Commission and the Tax Court of the United States. Mr. Butler served with the I. C. C. at Washington, D. C., from 1912 to 1916,

William J. Butler

when he joined the law firm of Winston, Strawn & Shaw, at Chicago. In 1921 he entered the service of Pullman and served as assistant general attorney until December 1, 1941, when he was appointed general attorney, the position he held at the time of his recent promotion.

Richard Robinson Bongartz, whose appointment as assistant general counsel of the Pennsylvania at Philadelphia, Pa., was reported in *Railway Age* of July 12, was born at Fall River, Mass., on July 15, 1906. He received his B. A. degree from Williams College in 1928 and his LL. B. from the University of Pennsylvania Law School in 1931. From September, 1931, to August, 1935, Mr. Bongartz was with the firm of Conlen, LaBrum & Beechwood, and on the latter date he entered the service of the Pennsylvania in the legal department. In 1940 he was appointed assistant general solicitor, which position he held at the time of his recent appointment as assistant general counsel.

Theodore Kugler Warner, Jr., whose appointment as assistant general counsel of the Pennsylvania at Philadelphia, Pa., was reported in *Railway Age* of July 12, was born at Philadelphia on September 13, 1909. He received his A. B. degree in 1931 and his LL. B. cum laude in 1934 from the University of Pennsylvania. From 1931 to 1934 Mr. Warner was a law clerk with Tustin & Wesley, Philadelphia, entering the service of the Pennsylvania

in a similar capacity in 1934. He was appointed assistant solicitor in 1935 and assistant general solicitor in 1941, which position he held until his recent promotion to assistant general counsel.

Lorimer Courtney has been elected assistant comptroller of the Bessemer & Lake Erie, with headquarters at Pittsburgh, Pa. Mr. Courtney has acted in a similar capacity in the manufacturing industry and has an extensive accounting background.

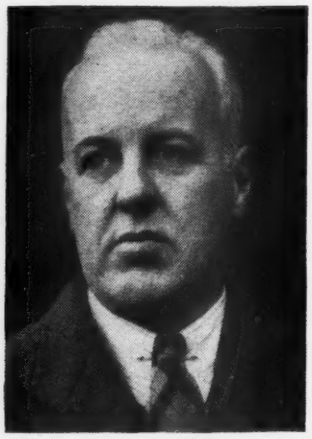
Edward Warden, attorney in the law department of the Chicago & North Western, at Chicago, will become general attorney on September 1, succeeding **James B. O'Shaughnessy,** who will resign on that date to become professor of law at Loyola University Law School. **William A. Redmon** has been appointed attorney effective on September 1.

Ralph E. Thompson, property manager of the Central of New Jersey, with headquarters at Jersey City, N. J., has been appointed to the newly-created position of chief accounting officer at Jersey City, effective September 15. **Philip M. Parker,** assistant to the chief executive officer at Jersey City, has been appointed property manager, succeeding Mr. Thompson. Mr. Thompson was born at Olympia, Wash., on February 13, 1899, and attended

Ralph E. Thompson

the College of Puget Sound, Tacoma, Wash., during World War I under the Army's specialized training program. He entered railroad service in 1919 with the Chicago, Milwaukee & St. Paul (now Chicago, Milwaukee, St. Paul & Pacific). In 1920 he was with the Chicago, Burlington & Quincy and in 1921 he joined the Jersey Central as a member of the valuation department. He left that road in 1927 to join the Interstate Commerce Commission as a land appraiser and he remained with the I. C. C. until 1933, when he returned to the Jersey Central as assistant tax agent. Mr. Thompson held the latter post until his appointment as property manager in October, 1943.

Mr. Parker was born at Bayonne, N. J., on August 25, 1898, and was graduated from Princeton University. After serving overseas with the U. S. Army in World War I, Mr. Parker started his business career as an electrical engineer with American Cables, Inc. He later was employed in the same capacity with the International Telephone & Telegraph Co. and with the management division of R. H. Macy & Co. He went with the Jersey



Philip M. Parker

Central in 1940 as a member of the staff of the trustees and in 1943 joined the staff of the chief executive officer. Mr. Parker was appointed assistant to the chief executive officer at Jersey City in January, 1945.

OPERATING

F. A. Fitzpatrick has been appointed trainmaster of the Illinois Central, with headquarters at Vicksburg, Miss., succeeding **H. S. Hardin,** who has been assigned to other duties at his own request.

C. E. Shaver, general yardmaster of the Canadian National at Sarnia, Ont., has been appointed terminal trainmaster at Windsor, Ont., succeeding **H. T. Walton,** promoted.

F. M. Adams, Jr., has been appointed trainmaster of the Buffalo division of the New York Central system, at Buffalo, N. Y.

J. U. Brazeau has been appointed superintendent of the Laurentian division of the Canadian Pacific at Montreal, Que., as

J. U. Brazeau

reported in *Railway Age* of August 30. Mr. Brazeau has been a railroader for over 30 years and had been train despatcher at Ottawa, Ont., and Smiths Falls before being appointed assistant superintendent at Ottawa two months ago.

William A. Nickel, terminal trainmaster of the Jersey Central lines at Allentown, Pa., has been appointed to the newly-created position of assistant superintendent of transportation, with headquarters at Jersey City, N. J. **Joseph J. Galuppo,** terminal trainmaster at Jersey City, has been transferred to Allentown to succeed Mr. Nickel. **Charles B. Schlegel,** trainmaster at Ashley, Pa., has been appointed terminal trainmaster at Jersey City, succeeding Mr. Galuppo. **Alvin H. Lewis,** assistant passenger trainman at Jersey City, has been appointed trainmaster at Long Branch, N. J., for the Jersey Central's Southern division and the New York & Long Branch, to succeed **Thomas P. Phillips,** who has been transferred to Ashley to succeed Mr. Schlegel.

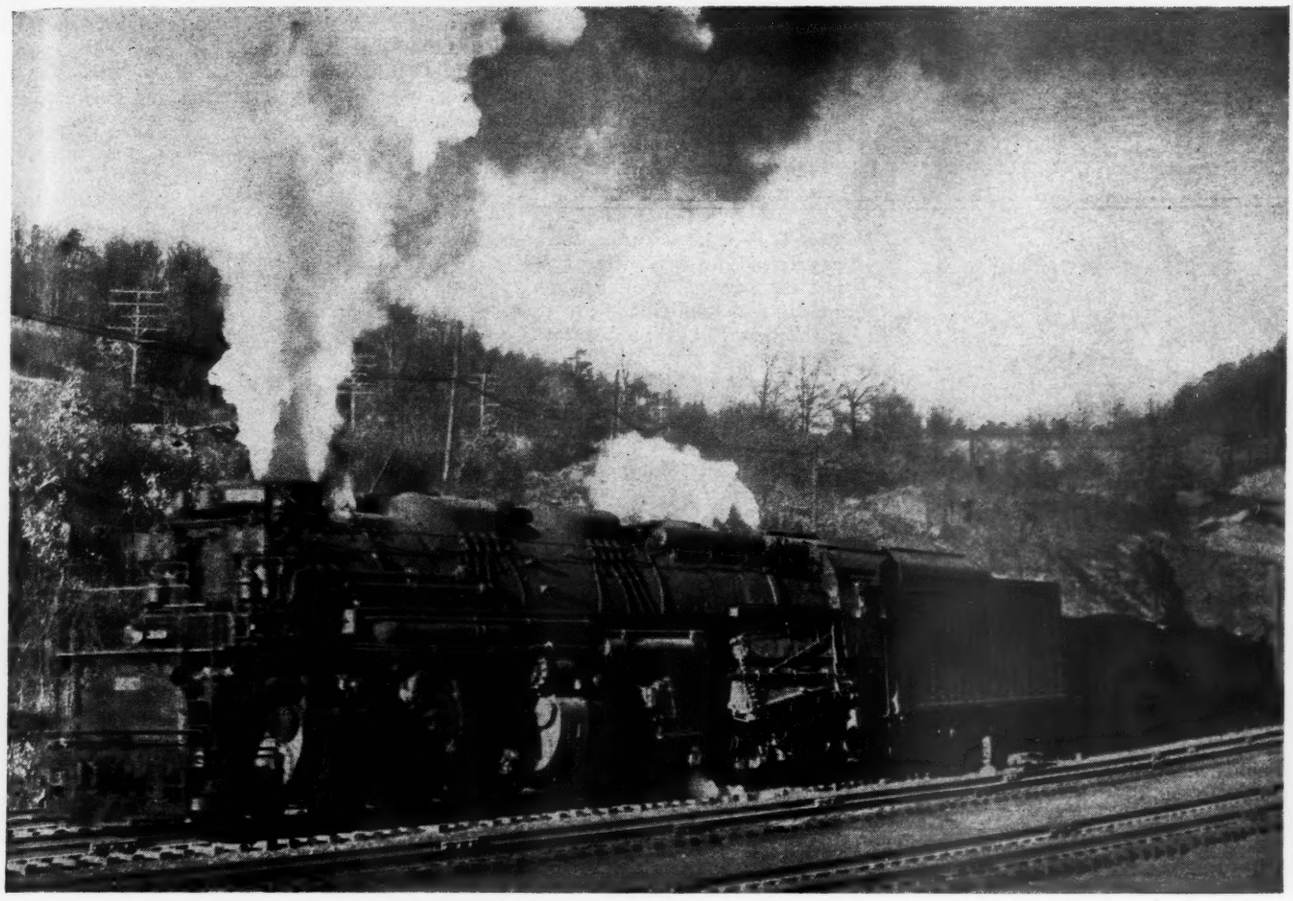
F. M. Donegan, whose appointment as general superintendent of the Algoma district of the Canadian Pacific at North Bay, Ont., was reported in *Railway Age* of August 30, entered railroad service on June 27, 1904, as a messenger for the Canadian Pacific at London, Ont. After serving in various positions on the London division of that road until October 10, 1907, Mr. Donegan went with the Algoma

F. M. Donegan

Central (now Algoma Central & Hudson Bay) in various positions as assistant agent, clerk, agent, relieving agent and auditor. On July 1, 1914, he became dispatcher for the Algoma Eastern (now C. P. R.) at Sudbury, Ont., and two years later he was appointed chief dispatcher, subsequently serving as assistant superintendent for the same road. On November 1, 1919, Mr. Donegan was promoted to superintendent of that road at Sudbury and on July 1, 1931, he became assistant superintendent of the Canadian Pacific at Sudbury, transferring to Farnham, Que., one year later. Mr. Donegan was promoted to superintendent of the Sudbury division of the Canadian Pacific in February, 1938, which position he held until his recent promotion.

F. A. Pouliot, whose appointment as general superintendent of the Quebec district of the Canadian Pacific at Montreal, Que., was reported in *Railway Age* of August 30, was born at Holyoke, Mass.,

News Department continued on next left-hand page.



Reduced running time

means increased availability

Lima-built steam locomotives have shown what modern steam power can do to decrease running time and increase availability and freight revenues.

Typical of the latest Lima-built power is the 2-6-6-6 illustrated above. This 10,000 ton coal train is effectively proving that operating efficiency backed up by modern motive power is capable of handling today's increased loads at today's higher speeds.

LIMA LOCOMOTIVE WORKS — LIMA LOCOMOTIVE WORKS INCORPORATED — INCORPORATED, LIMA, OHIO

on June 6, 1896. Mr. Pouliot entered railroad service on May 25, 1911, with the Canadian Pacific and served as junior clerk, superintendent's secretary and assist-

F. A. Pouliot

ant chief clerk in the superintendent's office, successively, at Farnham, Que. On November 3, 1916, he became telegraph operator on the Farnham division and two years later he became operator and relief dispatcher. On November 1, 1923, Mr. Pouliot was appointed train dispatcher at Farnham and on October 1, 1937, he was promoted to chief train dispatcher of the Laurentian division at Montreal. He was appointed supervisor of transportation at North Bay, Ont., on May 1, 1940, becoming superintendent at Woodstock, N. B., two years later. From February 19 to May 15, 1943, he served as assistant to general superintendent at Montreal, becoming superintendent of the Laurentian division at Montreal on the latter date. Mr. Pouliot was appointed general manager of the Quebec Central at Sherbrooke, Que., on July 1, 1944, which position he held until his recent appointment.

R. C. Wilson, whose promotion to superintendent of the New Orleans & Northeastern (part of the Southern), with headquarters at Hattiesburg, Miss., was

R. C. Wilson

reported in *Railway Age* of August 23, was born at Verbena, Ala., on October 12, 1896; entered the service of the Southern in 1917 as an operator at Birmingham, Ala.; and served from 1920 to 1939 as dispatcher, extra chief dispatcher, night chief dispatcher, and chief dispatcher, respectively. In September, 1939, Mr. Wilson became assistant trainmaster at Somerset, Ky., and in December of the same year, trainmaster at Oakdale, Tenn. Subsequently he served as trainmaster at Louisville, Ky., and at Huntingburg, Ind. On October 1, 1944, he was promoted to assistant superintendent, at Somerset; and on June 26, 1947, he was advanced to acting superintendent, at Louisville, the position he held at the time of his recent promotion.

J. M. Moudry has been appointed general manager of the Litchfield & Madison, with headquarters at Edwardsville, Ill. He was previously assistant division superintendent of the Chicago, Milwaukee, St. Paul & Pacific, at Milwaukee, Wis.

W. S. Hall, assistant general manager of the Canadian Pacific, with headquarters at Vancouver, B. C., has retired after 44 years of service. Succeeding to his duties is **E. S. McCracken,** general superintendent, Algoma district at North Bay, Ont., whose transfer to Vancouver was reported in *Railway Age* of August 30.

H. W. Hale, whose promotion to superintendent of transportation of the St. Louis-San Francisco, at Springfield, Mo., was reported in *Railway Age* of August 2, was born at DeKalb, Tex., on March 21, 1890, entered the service of the Frisco in 1908, and served until 1920 as telegrapher, ticket clerk, car distributor, dispatcher,

H. W. Hale

night chief dispatcher, and chief dispatcher. In 1920 he was appointed assistant superintendent, and served in that capacity on the River and Southwestern divisions until May 1, 1937, when he was appointed special representative of the general manager. On May 1, 1939, Mr. Hale was promoted to superintendent of the Northern division, with headquarters at Fort Scott, Kan., and on December 1, 1943, he was transferred to the Southwestern division, at Tulsa, Okla. Three years later he was transferred to Springfield, where he remained until his recent promotion.

John F. Meredith, whose promotion to superintendent of the Clinchfield, at Erwin, Tenn., was reported in *Railway Age* of August 16, was born on May 8, 1880, at Pembroke, Va., and attended Hampden Sidney College. Mr. Meredith entered railroad service in 1901 with the Norfolk & Western as fireman and engineer, and

John F. Meredith

in 1909 he joined the Clinchfield as engineer. He subsequently held positions as traveling fireman, road foreman, assistant trainmaster and trainmaster prior to his recent promotion.

TRAFFIC

R. G. Evans, general agent of the Grand Trunk Western at Washington, D. C., has been appointed general agent, passenger department, with headquarters at Detroit, Mich., succeeding **H. L. McCaughey,** who has retired.

W. B. Key has been appointed general agent of the Missouri Pacific at New Iberia, La., succeeding **E. H. Buffington,** who has retired after 37 years of service with the M. P.

Clyde Jinks has been appointed general passenger and ticket agent of the Terminal Railroad Association of St. Louis, at St. Louis, Mo., succeeding **A. C. Barnett,** who hsa retired after 57 years of service.

R. L. Mansfield, assistant to general industrial agent of the Seaboard Air Line, has been promoted to assistant general industrial agent, with headquarters as before at Norfolk, Va. **B. C. Parkinson,** chief clerk in the industrial department, succeeds Mr. Mansfield as assistant to general industrial agent.

J. Morley Frank, chief clerk in the freight traffic manager's office of the Grand Trunk Western at Chicago, has been promoted to general agent, with headquarters at Kansas City, Mo. He replaces **A. R. Menning,** who has been transferred to Seattle, Wash., succeeding the late **C. J. Restall.**

Joseph L. Vaugier has been appointed general agent of the Illinois Central, with headquarters at Markham yards, Hazel Crest, Ill.

C. O. Tobias has been appointed general agent of the Denver & Rio Grande Western, with headquarters at Boston,

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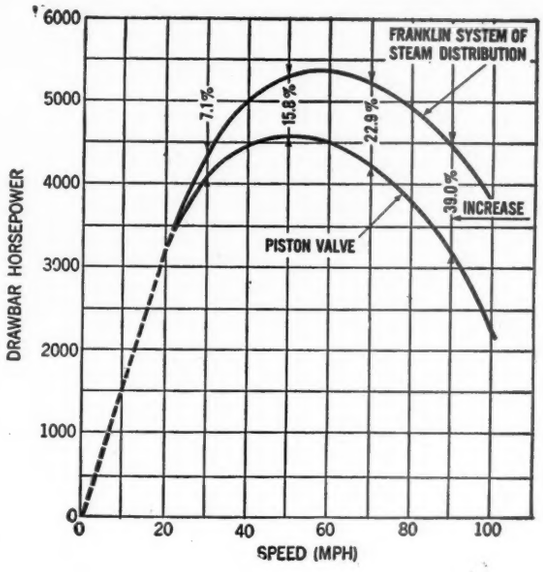
MORE POWER



This curve shows a comparison of horsepower at rear of tender for a modern locomotive when equipped with piston valves and when equipped with the Franklin System of Steam Distribution. In both cases, steam consumption by the engine is 90,000 lbs. per hour.

Computations based on:

Type 4-8-4

Cylinders 25" x 32"

Driving Wheels 80"

Boiler Pressure 300 lb

Steam Temperature 730° F

Total Heating Surface 4225 sq ft

Grate Area 100.2 sq ft

from a locomotive equipped with the Franklin System of Steam Distribution

This curve shows the improvement in horsepower output that may be expected from a modern locomotive when it is equipped with the Franklin System of Steam Distribution.

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AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

Mass., succeeding **J. W. Westlake,** transferred.

Charles G. Hoover, freight claim agent of the Bessemer & Lake Erie, has been appointed assistant general freight agent, with headquarters as before at Pittsburgh, Pa. **Carl E. McGuire,** agent at Erie, Pa., has been promoted to freight claim agent, at Pittsburgh.

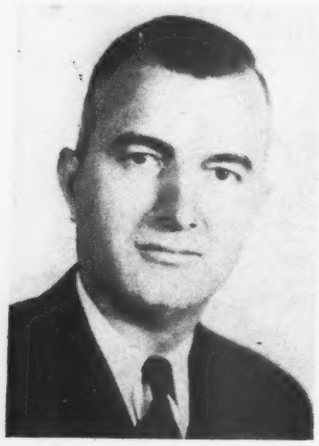
A. J. Tolin has been appointed assistant general freight agent of the Atlantic Coast Line, with headquarters at Charleston, S. C.

Clark Dunn, district passenger agent of the Louisville & Nashville at New Orleans, La., has been promoted to division passenger agent at Atlanta, Ga., succeeding **F. T. Alexander,** who has retired after 46 years of service with the road. Mr. Dunn is succeeded at New Orleans by **A. E. Jackson,** city passenger agent at that point.

LeRoy E. Brown, general agent of the Texas & Pacific, with headquarters at Winston-Salem, N. C., has been transferred to Cincinnati, Ohio, succeeding the late **Roy R. Hill. Felix C. Hege,** traveling freight agent at Atlanta, Ga., succeeds Mr. Brown.

A. O. Plunkett, general agent of the Minneapolis, St. Paul & Sault Ste. Marie at Grand Rapids, Mich., has been promoted to assistant general freight agent, with headquarters at Philadelphia, Pa. Mr. Plunkett is succeeded by **F. E. Johnson. E. M. Ostby** has been appointed general agent, with headquarters at San Francisco, Cal.

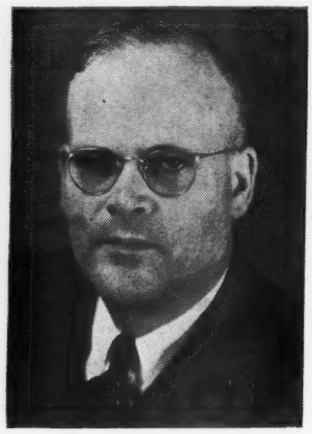
James Henry Hatcher, whose appointment as assistant passenger traffic manager of the Atlantic Coast Line at Wilmington, N. C., was announced in *Railway Age* of August 16, was born on September 4, 1900, at Bascom, Fla. In April, 1918, Mr. Hatcher became assistant purser for the Peninsula & Occidental Steamship Company at Key West, Fla. He went with the Norfolk Southern as soliciting freight agent at Raleigh, N. C., in October, 1924, and was promoted to traveling freight



James Henry Hatcher

agent in June, 1925. Entering the service of the Atlantic Coast Line on January 20, 1927, as traveling freight agent, Mr. Hatcher was promoted to commercial agent in June, 1928, and in October, 1937, became assistant general freight agent at Miami, Fla. He was promoted to general eastern freight agent, with headquarters at New York, in June, 1940, going to Wilmington, N. C., one year later as manager of development service. Remaining at Wilmington, Mr. Hatcher served as assistant to vice-president from October, 1942, to September, 1944, when he was appointed executive general agent at Washington, D. C., the position he held at the time of his recent appointment.

C. M. Biggs, whose appointment as freight traffic manager of the central district of the Southern Pacific, with headquarters at San Francisco, Cal., was reported in *Railway Age* of August 23, was born at Dallas, Tex., on November 17, 1896; entered railroad service in 1909 as an office boy in the car service department of the Chicago, Miwaukee, St. Paul & Pacific, at Seattle, Wash.; and served later in various clerical capacities in the freight claim department at that point. In February, 1917, he entered the service of the Southern Pacific at Seattle, and in June of the same year he was appointed



C. M. Biggs

city freight agent. He became traveling freight and passenger agent in 1920; industrial agent at Portland, Ore., in 1925; general agent at Seattle in 1928; division freight and passenger agent at Klamath Falls, Ore., in 1930; division freight agent at Oakland, Cal., in 1931; and division freight agent at San Francisco in 1934. In February, 1939, Mr. Biggs was appointed assistant general freight agent at San Francisco, and in March, 1940, he was named general freight agent at Los Angeles, Cal. In June, 1941, he was advanced to general eastern freight agent at New York, the position he held at the time of his recent promotion.

T. A. O'Donnell, whose appointment as general freight agent-sales of the Chicago & North Western, with headquarters at Chicago, was reported in *Railway Age* of August 23, entered the service of the North Western in 1908, and served in various clerical capacities until 1920, when he was promoted to city agent at Chicago. One year later he became chief clerk to the assistant freight traffic manager. In 1925 Mr. O'Donnell was named chief clerk to the assistant freight and passenger traffic manager, and in 1927 he was appointed chief clerk, reconsigning and tracing department. He became chief clerk, general freight department, in 1933, and served in that capacity until March 1, 1946, when

T. A. O'Donnell

he was advanced to assistant general freight agent, the position he held at the time of his recent promotion.

Otey W. Hall, assistant general industrial agent of the Seaboard Air Line, with headquarters at Norfolk, Va., has been promoted to express traffic manager, with the same headquarters, succeeding **G. R. Ward, Jr.,** who has been assigned to duties in the Industrial department. Born at Ports-

Augenger

Otey W. Hall

mouth, Va., Mr Hall first entered the Seaboard's employ in 1928 in the commerce division of the freight traffic department. Successive promotions carried him to higher positions in that department, and he was also employed in the president's office. Following this, he entered the road's industrial department and was appointed assistant general industrial agent in 1944, the position he held at the time of his present appointment.

Thomas Henry Gurney, whose retirement as passenger traffic manager of the Chesapeake & Ohio at Richmond, Va., was reported in *Railway Age* of July 5, was born at Covington, Ky., on February 3, 1875. Mr. Gurney entered railroad service in 1894 as stenographer in the general

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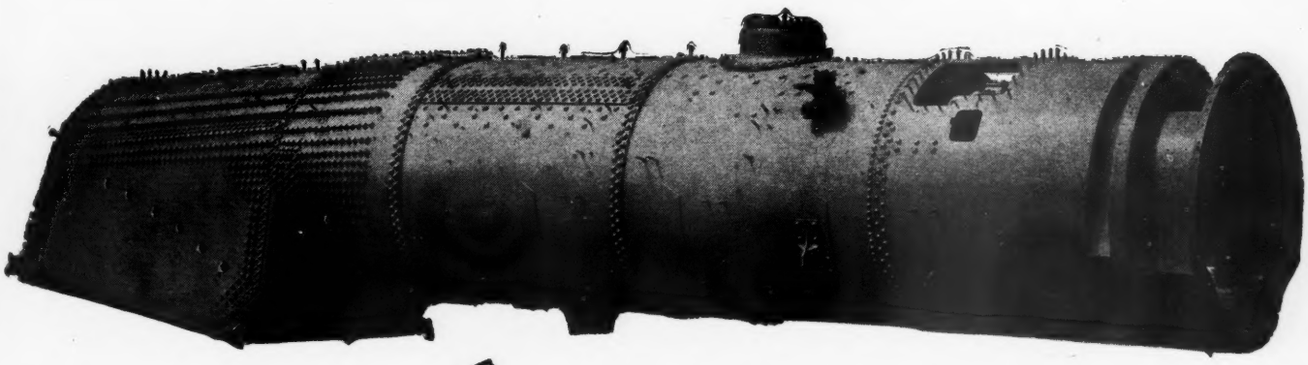
A working model of this boiler



with Security Circulators showing water circulation . . will be in operation at the American Arch Exhibit

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SECURITY CIRCULATOR DIVISION

passenger department of the Cleveland, Cincinnati, Chicago & St. Louis at Cincinnati, Ohio, serving in this capacty untl 1896. He then served untl 1903 as stenographer, clerk, division clerk and chief rate clerk, successively, in the general passenger department of the Cincinnati, Hamilton & Dayton (now Baltimore & Ohio). From 1903 to 1904 Mr. Gurney was chief clerk in the general passenger department of the Chicago, Cincinnati & Louisville (now Chesapeake & Ohio) at Richmond, Va., and Cincinnati and from 1904 to 1905 he was chief clerk in the general passenger department of the Great Central system at Cincinnati. In 1906 he became general passenger agent of the Chicago, Cincinnati & Louisville, serving at Cincinnati and Chicago, successively, until 1910, when he became district passenger agent of the Chesapeake & Ohio at Chicago. From 1917 to 1924 he was assistant general passenger agent of the C. & O. at Cincinnati and from 1924 to 1929, general passenger agent at Richmond. Mr. Gurney was appointed passenger traffic manager at Richmond in 1930.

ENGINEERING & SIGNALING

A. B. Chaney, district engineer of the Missouri Pacific at Little Rock, Ark., has been appointed assistant engineer maintenance of way, with headquarters at St. Louis, Mo., succeeding **W. H. Vance,** who has retired after more than 45 years of railroad service. **H. D. Knecht** has been appointed district engineer, at Little Rock, succeeding Mr. Chaney.

R. F. McCarvel, assistant engineer of the Butte, Anaconda & Pacific at Anaconda, Mont., has been appointed maintenance of way engineer. This change followed the death on August 16 of P. R. Peery, chief engineer.

James J. Coakley, circuit engineer of the Jersey Central lines, has been appointed assistant signal engineer of the Jersey Central lines and the New York & Long Branch, with headquarters at Jersey City, N. J.

Arthur Leonard Bartlett, whose appointment as assistant to chief engineer of the New York, New Haven & Hartford at New Haven, Conn., was reported in *Railway Age* of July 5, was born at Claremont, N. H., on November 22, 1884. Entering railroad service in 1909 with the Northern Pacific, he served until the following year as transitman and resident engineer. In 1911 he became surveyor, War Department, United States Engineers. Mr. Bartlett went with the New Haven in 1912 as transitman, becoming assistant engineer in 1914, and track supervisor in 1915. From 1917 to 1919 he served with the American Expeditionary Forces as captain, major and lieutenant colonel, U. S. Engineers. He returned to the New Haven in 1920 as assistant division engineer, becoming division engineer n 1923, mantenance engineer n 1930, and engineer maintenance of way in 1931, holding the latter position until his recent appointment as assistant to chief engineer.

James Bell Wilson, whose appointment as chief engineer of the Georgia at Atlanta, Ga., was reported in *Railway Age* of June 28, was born at Atlanta on June 16, 1905. Mr. Wilson received his B. S. in civil engineering from the Georgia School of Technology in 1926 and entered railroad service on June 21, 1926, as draftsman with the Atlanta, Birmingham & Atlantic (now Atlantic Coast Line). In November, 1926, he became valuation engineer, and in February, 1927, he was appointed assistant engineer of the successor road, the Atlanta, Birmingham & Coast (now Atlantic Coast Line), becoming its principal assistant engineer on February 1, 1939. On October 22, 1945, Mr. Wilson was appointed division engineer of the Georgia, which position he held at the time of his recent appointment as chief engineer.

MECHANICAL

Alvin R. Ruiter, whose retirement as superintendent of motive power of the Chicago, Rock Island & Pacific, with headquarters at Chicago, was reported in *Railway Age* of August 23, was born on June 26, 1880, at Dumont, Iowa, and attended school in Marshalltown, Iowa. He entered railroad service in 1897 with the Iowa Central as machinist apprentice, and in 1901 became machinist on the Chicago Great Western at Oelwein, Iowa. In 1903 he joined the Illinois Central as machinist at Waterloo, Iowa, and later held that position and that of roundhouse foreman with the Chicago, Milwaukee, St. Paul & Pacific, at Dubuque, Iowa, and Perry, respectively. He was employed by the Rock Island in 1905, and subsequently held positions as roundhouse foreman, general foreman and master mechanic. He held the latter position at various points on the railroad for 21 years, and in 1938 was appointed assistant to chief operating officer. On July 1, 1940, he was advanced to superintendent of motive power.

Aubrey M. Cary, general foreman of the Southern at Winston-Salem, N. C., has been appointed general Diesel supervisor at Spencer, N. C., succeeding **Virgil W. Trexler,** promoted.

E. K. Bloss, supervisor of Diesel maintenance and operation of the Boston & Maine, with headquarters at Boston, Mass., has been appointed mechanical engineer of the B. & M., the Maine Central and the Portland Terminal, reporting to the general manager. **P. C. Dunn** has been appointed assistant general superintendent motive power, reporting to the general superintendent motive power. Mr. Dunn will have complete jurisdiction over all Diesel motive power. The positions of supervisor and assistant supervisor of Diesel maintenance and operation have been abolished.

George R. Maloney has been appointed chief interchange inspector of the Peoria & Pekin Union joint freight car inspection bureau at Peoria, Ill., succeeding **William J. Owen,** who has retired.

PURCHASES AND STORES

C. S. Finlayson, whose promotion to assistant to the chief purchasing officer of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle, Wash., was reported in *Railway Age* of August 2, was born at St. Paul, Minn., on December 26, 1892. He entered the service of the Milwaukee on June 29, 1909, as an office boy in the purchasing department at Seattle. Mr. Finlayson served in various capacities

C. S. Finlayson

until February 15, 1923, when he was appointed assistant purchasing agent at Seattle, the position he held at the time of his recent promotion.

SPECIAL

Alfred G. Ivey has been appointed special representative in the public relations department of the Seaboard Air Line, with headquarters at Norfolk, Va.

OBITUARY

C. J. Restall, general agent of the Grand Trunk Western at Seattle, Wash., and previously general agent at Memphis, Tenn., died recently.

John B. Large, who retired on January 1, 1946, as assistant vice-president in charge of traffic of the Pennsylvania, died suddenly on August 29 as the result of a heart attack at his country home near Cambridge, Md. Mr. Large was born at Philadelphia, Pa., in 1882, where he was educated at the Episcopal Academy and the University of Pennsylvania. Following his graduation from college, he entered the service of the Pennsylvania in 1902 as a clerk at Germantown Junction station (Philadelphia) and was shortly afterwards transferred to the rate room in the general office at Philadelphia. After serving successively as traveling freight solicitor in the Boston, Mass., district, district freight solicitor at Providence, R. I., and freight solicitor at Reading, Pa., he became division freight agent at Erie, Pa., in 1912 and was later transferred to Buffalo, N. Y. In 1917 he was promoted first to assistant general freight agent and then to general freight agent on the P. R. R. lines East of Pittsburgh and Erie. In 1920 Mr. Large became freight traffic manager of the system, at Philadelphia, being promoted to assistant general traffic manager with jurisdiction over passenger as well as freight matters in 1925 and to general traffic manager in 1927. He was advanced to assistant vice-president in charge of traffic on May 16, 1943, and was retired from active duty on January 1, 1946.

Table of Operating Revenues and Expenses appears on the next left-hand page.

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 126 monthly reports of revenues and expenses representing 130 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF JUNE 1947 AND 1946

Item	United States		Eastern District		Southern District		Western District	
	1947	1946	1947	1946	1947	1946	1947	1946
Miles of road operated at close of month	227,309	227,525	53,737	53,780	46,162	46,290	127,410	127,455
Revenues:								
Freight	$556,888,624	$458,538,556	$216,254,418	$167,811,805	$118,004,436	$100,632,114	$222,629,770	$190,094,637
Passenger	84,787,035	106,605,061	43,098,227	51,032,901	12,296,621	16,238,635	29,392,187	39,333,525
Mail	10,936,486	10,419,379	4,015,883	3,779,168	2,017,915	1,891,558	4,902,688	4,748,653
Express	10,052,741	6,803,674	3,633,185	*2,497	1,474,373	899,128	4,945,183	5,907,043
All other operating revenues	34,243,803	29,631,578	15,140,464	13,767,603	5,763,377	4,253,450	13,339,962	11,610,525
Railway operating revenues	696,908,689	611,998,248	282,142,177	236,388,980	139,556,722	123,914,885	275,209,790	251,694,383
Expenses:								
Maintenance of way and structures	105,653,917	96,019,341	38,504,735	33,749,881	21,742,817	20,547,243	45,406,365	41,722,217
Depreciation	10,114,147	10,029,438	4,332,789	4,289,857	1,726,605	1,699,299	4,054,753	4,040,282
Retirements	1,220,184	463,789	129,023	145,947	313,830	98,459	777,331	219,383
Deferred maintenance	*389,567	85,572	*16,159	*104,743	*16,341	778,705	*357,067	*588,390
Amortization of defense projects	108,178	28,905	12,180	11,598	21,570	15,804	74,428	1,503
Equalization	*2,571,383	1,057,518	*2,114,907	695,266	*40,595	583,343	*415,881	*221,091
All other	97,172,358	84,354,119	36,161,809	28,711,956	19,737,748	17,371,633	41,272,801	38,270,530
Maintenance of equipment	127,055,715	116,389,710	54,112,730	49,167,275	25,886,417	22,848,590	47,056,568	44,373,845
Depreciation	19,364,367	18,232,767	7,799,555	7,453,871	4,269,301	3,944,035	7,295,511	6,834,861
Retirements	*45,456	*21,852	*11,328	*10,773	*15,577	*2,046	*18,551	*9,033
Deferred maintenance and major repairs	*635,844	8,255	.....	*9,965	*419,582	230,229	*216,262	*212,009
Amortization of defense projects	1,247,439	792,493	458,896	325,952	257,212	128,927	531,331	337,614
Equalization	*565,839	79,802	*167,830	28,810	*341,024	110,293	*56,985	*59,301
All other	107,691,048	97,298,245	46,033,437	41,379,380	22,136,087	18,437,152	39,521,524	37,481,713
Traffic	14,207,764	13,945,046	4,858,519	4,976,793	3,080,454	2,744,503	6,268,791	6,223,750
Transportation—Rail line	272,731,979	261,875,466	117,243,277	111,298,220	50,312,136	49,025,870	105,176,566	101,551,376
Miscellaneous operations	10,443,261	10,054,525	3,946,088	3,914,685	1,371,012	1,449,030	5,126,161	4,690,810
General	19,964,453	19,078,956	7,807,563	7,428,763	4,472,853	4,087,875	7,684,037	7,562,318
Railway operating expenses	550,057,089	517,363,044	226,472,912	210,535,617	106,865,689	100,703,111	216,718,488	206,124,316
Net revenue from railway operations	146,851,600	94,635,204	55,669,265	25,853,363	32,691,033	23,211,774	58,491,302	45,570,067
Railway tax accruals	72,653,480	44,664,692	26,540,173	14,920,426	17,223,020	12,081,260	28,890,287	17,663,006
Pay-roll taxes	28,858,187	20,463,346	12,064,179	8,244,821	5,578,334	4,005,232	11,215,674	8,213,293
Federal income taxes	20,554,555	3,134,768	5,445,056	*1,461,243	6,946,150	3,819,560	8,163,349	776,451
All other taxes	23,240,738	21,066,578	9,030,938	8,136,848	4,698,536	4,256,468	9,511,264	8,673,262
Railway operating income	74,198,120	49,970,512	29,129,092	10,932,937	15,468,013	11,130,514	29,601,015	27,907,061
Equipment rents—Dr. balance	10,805,032	8,696,235	4,602,952	3,595,059	*367,349	69,867	6,569,429	5,031,309
Joint facility rent—Dr. balance	3,192,031	3,449,325	1,535,268	1,675,747	477,521	574,404	1,179,242	1,199,174
Net railway operating income	60,201,057	37,824,952	22,990,872	5,662,131	15,357,841	10,486,243	21,852,344	21,676,578
Ratio of expenses to revenues (per cent)	78.9	84.5	80.3	89.1	76.6	81.3	78.7	81.9

FOR THE SIX MONTHS ENDED WITH JUNE 1947 AND 1946

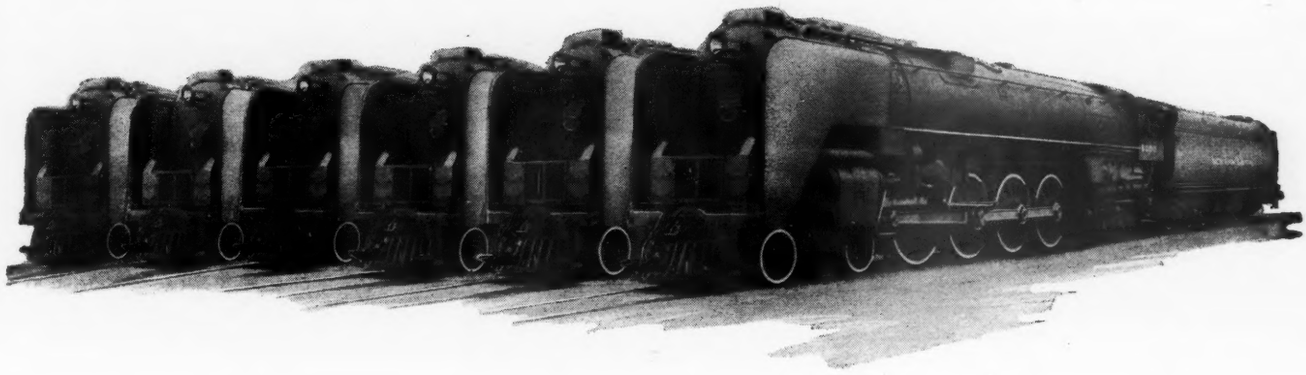
Item	United States		Eastern District		Southern District		Western District	
	1947	1946	1947	1946	1947	1946	1947	1946
Miles of road operated at close of month	227,374	227,546	53,732	53,815	46,204	46,277	127,438	127,454
Revenues:								
Freight	$3,375,029,093	$2,628,194,962	$1,299,567,147	$972,850,520	$728,694,158	$567,033,764	$1,346,767,788	$1,088,310,678
Passenger	457,179,109	671,750,058	227,133,648	295,234,446	77,396,560	118,536,695	152,648,901	257,978,917
Mail	66,418,325	61,969,792	23,806,471	21,523,963	12,293,852	11,404,819	30,318,002	29,041,010
Express	60,961,266	44,590,915	19,442,722	3,427,082	11,885,206	7,502,144	29,633,338	33,661,689
All other operating revenues	190,310,607	171,091,005	84,846,395	78,469,930	32,959,063	25,408,149	72,505,149	67,212,926
Railway operating revenues	4,149,898,400	†3,577,596,732	1,654,796,383	1,371,505,941	863,228,839	729,885,571	1,631,873,178	1,476,205,220
Expenses:								
Maintenance of way and structures	568,717,188	565,608,503	203,587,828	197,355,442	127,343,413	124,249,021	237,785,947	244,004,040
Depreciation	60,727,142	60,068,245	25,989,991	25,790,999	10,389,713	10,163,354	24,347,438	24,113,892
Retirements	3,883,727	3,256,683	779,000	766,272	938,203	532,259	2,166,524	1,958,152
Deferred maintenance	*2,134,048	*2,629,581	*169,187	*549,520	*145,122	96,806	*1,819,739	*2,176,867
Amortization of defense projects	624,637	131,710	49,897	66,555	180,644	54,151	394,096	11,004
Equalization	6,934,905	12,494,385	3,329,136	6,465,061	1,796,693	3,256,874	1,809,076	2,772,450
All other	498,680,825	492,287,061	173,608,991	164,816,075	114,183,282	110,145,577	210,888,552	217,325,409
Maintenance of equipment	757,224,949	722,853,339	326,206,791	300,183,007	154,098,289	139,534,667	276,919,869	283,135,665
Depreciation	114,528,232	110,428,803	46,317,906	45,413,916	25,041,375	23,632,855	43,168,951	41,382,032
Retirements	*206,953	*208,963	*36,671	*83,436	*64,870	*61,519	*105,412	*64,008
Deferred maintenance and major repairs	*2,564,935	*1,733,848	*2,840	*169,368	*1,118,594	*81,701	*1,443,501	*1,482,779
Amortization of defense projects	7,494,289	3,786,067	2,794,371	1,609,535	1,505,232	603,478	3,194,686	1,573,054
Equalization	930,044	1,554,291	120,667	*17,536	1,017,390	1,397,056	33,321	174,771
All other	637,044,272	609,026,989	277,254,692	253,429,896	127,717,756	114,044,498	232,071,824	241,552,595
Traffic	85,051,104	81,679,096	29,368,252	29,093,072	18,253,034	16,448,280	37,429,818	36,137,744
Transportation—Rail line	1,657,219,408	1,537,229,341	724,750,084	659,358,462	312,946,532	285,933,959	619,522,792	591,936,920
Miscellaneous operations	61,423,462	61,258,701	22,953,619	23,876,781	9,458,418	9,219,585	29,011,425	28,162,335
General	118,599,605	116,776,056	45,942,877	45,478,121	25,889,596	24,746,179	46,767,132	46,551,756
Railway operating expenses	3,248,235,716	3,085,405,036	1,352,809,451	1,255,344,885	647,989,282	600,131,691	1,247,436,983	1,229,928,460
Net revenue from railway operations	901,662,684	492,191,696	301,986,932	116,161,056	215,239,557	129,753,880	384,436,195	246,276,760
Railway tax accruals	451,570,562	266,428,223	157,496,972	85,399,341	109,390,887	71,352,479	184,682,703	109,676,403
Pay-roll taxes	169,825,753	125,054,779	71,180,027	51,089,141	33,503,933	24,045,511	65,141,793	49,920,127
Federal income taxes	143,905,090	12,361,505	32,798,082	*16,570,519	47,042,938	19,918,551	64,064,070	9,013,473
All other taxes	137,839,719	129,011,939	53,518,863	50,880,719	28,844,016	27,388,417	55,476,840	50,742,803
Railway operating income	450,092,122	225,763,473	144,489,960	30,761,715	105,848,670	58,401,401	199,753,492	136,600,357
Equipment rents—Dr. balance	61,014,448	51,776,796	29,869,081	22,405,871	*1,745,506	153,218	32,890,873	29,217,707
Joint facility rent—Dr. balance	20,654,680	19,224,090	10,009,163	9,579,655	3,193,972	2,821,707	7,451,545	6,822,728
Net railway operating income	368,422,994	154,762,587	104,611,716	*1,223,811	104,400,204	55,426,476	159,411,074	100,559,922
Ratio of expenses to revenues (per cent)	78.3	86.2	81.8	91.5	75.1	82.2	76.4	83.3

* Decrease, deficit, or other reverse item.

† Railway operating revenues are after deduction of $1,489,945 for the six months ended with June 1946, to create a reserve for land grant deductions in dispute.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

HSGI helped these locomotives hang up a great utilization record



IN six grueling months these six Class S locomotives, hauling passenger trains over the New York Central route between Harmon, N. Y. and Chicago, piled up an impressive total of nearly 800,000 miles. This was an average of almost 22,000 miles a month per locomotive.

All six locomotives are equipped with HSGI cylinder bushings and Hunt-Spiller Light Weight Cast Steel Pistons. All but one have HSGI valve bushings, Hunt-Spiller Light Weight Valves, and combination (bronze and iron) Duplex Sectional Valve Rings. This splendid demonstration of efficiency was made possible by sound design and quality of components, and not the least important among these were the Hunt-Spiller products mentioned above.

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller *Air Furnace* Gun Iron.

HUNT SPILLER GUN IRON HSGI *AIR FURNACE PROCESS*

HUNT-SPILLER MFG. CORPORATION

N. C. RAYMOND, *President* E. J. FULLER, *Vice-Pres. & Gen. Mgr.*

383 Dorchester Ave. ★ South Boston 27, Mass.

Canadian Representatives: Joseph Robb & Co., Ltd., 4050 Namur St., Montreal 16, P. Q.

Export Agents:
International Rwy. Supply Co., 30 Church Street, New York 7, N. Y.

Cylinder Bushings	Crosshead Shoes	Dunbar Sectional Type Packing
Cylinder Packing Rings	Hub Liners	Duplex Sectional Type Packing for Cylinders and Valves (Duplex Springs for Above Sectional Packing)
Pistons or Piston Bull Rings	Shoes and Wedges	
Valve Bushings	Floating Rod Bushings	
Valve Packing Rings	Light Weight Valves	Cylinder Snap Rings
Valve Bull Rings	Cylinder Liners and Pistons for Diesel Service	Valve Rings, All Shapes

General News

(*Continued from page 73*)

B. & O. Floodlights Chicago's Grand Central Station

A bank of searchlights, throwing nearly a million and a half candlepower of illumination on the tower of Grand Central station, Harrison and Wells streets, Chicago, has been installed by the Baltimore & Ohio. A new marquee at the pedestrian entrance to the waiting room furnishes protection from the elements and additional brilliant illumination. More lghting has also been installed in the arches at the concourse entrance for vehicular traffic.

Legion of Merit to W. T. Rice

William T. Rice, superintendent of the Potomac yards of the Richmond, Fredericksburg & Potomac, recently was presented the Legion of Merit by Brigadier General Paul F. Yount, assistant chief of transportation of the Army. During the war Mr. Rice, as a lieutenant colonel in the Transportation Corps, was executive officer and, later, commanding officer of the 791st Railway Operating Battalion, assigned to the "operation of the most difficult section of the railway line in Iran."

Buhner Nominated for Trucking Association Presidency

Edward J. Buhner, president of Silver Fleet Motor Express, Louisville, Ky., has been nominated for the presidency of American Trucking Associations. The nomination was made by the A. T. A. nominating committee, and Mr. Buhner is scheduled to be elected next month at A. T. A.'s annual convention in Los Angeles, Cal.

He will succeed Ted V. Rodgers, who has served continuously since A. T. A. was formed in 1933 and whom the nominating committee has proposed for the newly-created position of chairman of the board of directors. The election will mark the inauguration of A. T. A.'s new policy of making annual changes in the presidency. That policy, which also contemplates that the retiring president shall be elected for a one-year term as chairman of the board, was adopted after President Rodgers announced early this year that his present term would be his last. Also on the slate recommended by the nominating committee is H. D. Horton of Associated Transport, Inc., who has been proposed for the first vice-presidency.

Effective Railroad Advertising Hailed in Survey

The newspaper advertising campaigns of the Southern Pacific and the Southern are included in the 1947 edition of the Blue Book, annual compilation of newspaper advertising "success stories" published by the Bureau of Advertising of the American Newspaper Publishers Association.

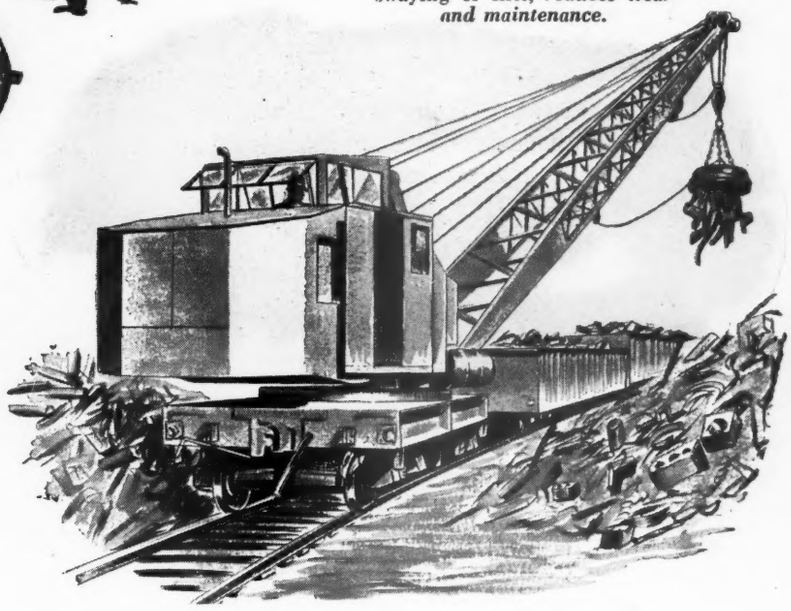
(*Continued on page 92*)

BROWNHOIST GIVES YOU MORE FOR YOUR MATERIAL HANDLING DOLLAR

360° VISIBILITY from the *patented Monitor-type cab* assures safer, faster, easier crane operation. The operator can see in any direction at a glance. No blind spots, no awkward maneuvering, no dangerous guesswork.

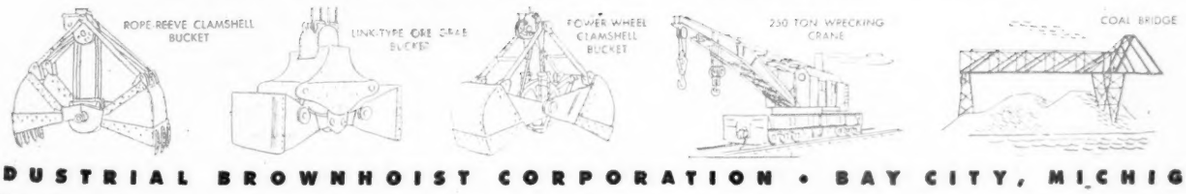
SMOOTH, EASY SWING of the Brownhoist Diesel Locomotive Crane cab means an end to sudden grabbing which makes spotting of loads difficult. It minimizes hazardous swaying of lifts, *reduces wear and maintenance.*

HUSKY RUGGEDNESS of construction from trucks to boom tip absorbs the shock and strain of capacity loads, helps keep maintenance costs to a minimum, makes the Brownhoist Diesel Locomotive Crane *your best long-term investment in economical material handling.*



Join the long list of crane owners who are capitalizing upon the many Brownhoist *engineering and construction advantages* such as (1) 360° visibility; (2) positive response to air-operated controls placed within easy reach of the operator; (3) one-piece cast steel bed; (4) rotating and travel friction disc clutches with 1-point adjustment; and (5) 14″ safety clearance between rotating bed and car body. *Write for complete facts.*

BROWNHOIST BUILDS BETTER CRANES



INDUSTRIAL BROWNHOIST CORPORATION • BAY CITY, MICHIGAN

DISTRICT OFFICES: NEW YORK, PHILADELPHIA, CLEVELAND, CHICAGO • AGENCIES: DETROIT, BIRMINGHAM, HOUSTON, DENVER, LOS ANGELES, SAN FRANCISCO, SEATTLE, VANCOUVER, B. C., WINNIPEG, CANADIAN BROWNHOIST LTD., MONTREAL, QUEBEC.

(*Continued from page 90*)

Fifty campaigns were chosen for this ninth edition of the Blue Book. They cover 15 different national advertising classifications, the work of 39 advertising agencies.

The Blue Book tells, through case histories, how the winning campaigns met and solved individual problems of each advertiser. The reports set forth the objective sought, method used, and results achieved. Representative advertisements from each of the successful campaigns are reproduced. The Blue Book points out that among the ten leading transportation advertisements mentioned in the summary of the first 100 reports of the Continuing Study of Newspaper Reading, the Southern was first on a percentage basis.

The Southern Pacific's campaign was planned to answer comparative rate advertising of air lines and to convince the public "that the railroad has many advantages as a means of transportation."

Initially intended for San Francisco alone, coverage was extended when effectiveness had been proved by the unprecedented responses won by a single newspaper ad. Although no letters were solicited in the advertisement, more than 400 were received, more than 95 per cent of them laudatory. The Blue Book states the campaign "attracted widespread attention and rate comparisons in air line advertising became noticeably less conspicuous."

Says Coal Industry Is Facing Its Greatest Car Shortage

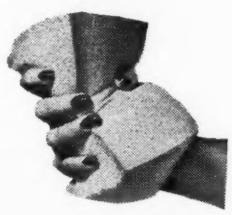
During the next several months there is "every probability" of the most severe car shortage ever experienced in the history of the coal industry, Fred A. Schleifer, chairman of the coal and coke committee, Mid-West Shippers Advisory Board, stated last week in a letter sent to railroads, industrial consumers of coal and coal dealers. Pointing out that the demand for coal overseas was a factor contributing to the lack of cars, Mr. Schleifer urged that: (1) all users of coal cars issue clear and positive instructions to their loading or unloading forces; (2) that all cars be loaded to their maximum capacity and unloaded completely; and (3) that cars be released with the greatest possible speed.

An estimated 1,700,000 tons of coal were "lost" during the week ending August 16 due to the car shortage, the coal and coke chairman stated. He added that "there does not appear to be a great deal of relief in sight during the next three or four months as we approach the annual seasonal traffic peak." The "big majority" of mines are losing "one or more days each week" because there are no cars, he declared.

Among other factors contributing to the critical shortage, according to Mr. Schleifer, are: (1) greater export of coal to Canada, with a resulting longer turnaround time than that for shipments within the United States; (2) short supply of gondolas for steel, sand, gravel and other commodities; and (3) a prospective all-time record sugar beet movement. Contact with major car builders offers "but little encouragement" for relief, as car retirements exceed new equipment, it was stated.

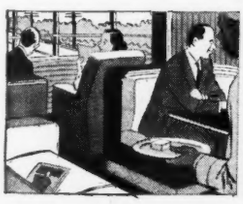
UNITED STATES RUBBER COMPANY

SERVING THROUGH SCIENCE

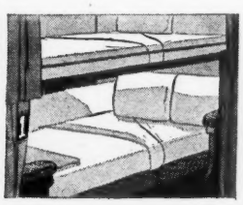


KOYLON Foam keeps *cool*—even on the hottest days! No wonder, for Koylon is porous. It "breathes" fresh air with every contact and release of pressure. What a comfort this is when it's "too hot to move"! It's a welcome feature wherever people sit or sleep.

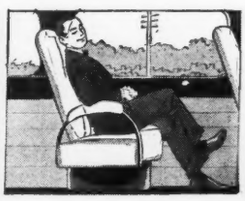
Koylon is sagproof, clean, odorless and verminproof. 12 years of testing on major railroads prove that Koylon takes constant hard wear. Providing Koylon comfort is easy and economical as well as permanent. In every way, *it pays to specify Koylon Foam.*



Make matchless comfort a selling feature! Koylon helps take the fatigue out of long trips.



Koylon Foam mattresses invite sleep. They're light weight, never need turning—easy to handle.



Never sags! Koylon is clean, odorless, verminproof—washable with plain soap and water!

WHEREVER COMFORT COUNTS, PUT

U.S. Koylon FOAM
Comfort Engineered

U. S. Koylon Foam Division, Mishawaka, Indiana

Current Publications

Pamphlets

American Safety Standards, 20 pages, with illustrations. Published by the American Standards Association, 70 E. 45 street, New York, Free.

Designed for the use of safety engineers, legislators, and others interested in the problems it discusses, this pamphlet contains a listing of approximately 200 standards for safety and industrial health. A brief description of each item makes it easy to locate standards for any particular field. These standards represent the accumulated wisdom of industrial experience and constitute a symposium of the best methods thus far developed for the solution of the technical problems of safety.

Interstate Commerce Law; Selected Cases and Questions for Study, prepared by the Committee on Education and Research of the Associated Traffic Clubs of America. 49 pages. Published by the Associated Traffic Clubs of America, Cincinnati 2, Ohio. Available to students at $1.50 a copy and through secretaries of member traffic clubs on basis of 75 cents a copy when ordered in lots of ten or more.

Since the study of interstate commerce law requires a thorough knowledge of the Interstate Commerce Act, and the decisions of the Interstate Commerce Commission and of the federal courts, particularly the United States Supreme Court, the committee has selected certain typical cases for study. These cases, together with their citations, are listed by subject, such as interstate commerce, freight car service, railroad switch connections, etc., and each subject is accompanied by a set of questions to be answered by the student after the cases have been studied. The booklet contains an alphabetical list of the subjects covered and a list of the cases cited.

Clergymen Examine Free Economy; Number 1—Railroads, by Albert A. Gordanier, D. D. Nine pages. Published by the National Council of Clergymen and Laymen, 286 N. Broad st., Elizabeth, N. J. Price, 50 cents.

This is the first of a series of pamphlets to be published by the National Council of Clergymen and Laymen which "confines itself to social and economic research revealing the true picture of free enterprise and its relations to the churches of the United States." In it the author discusses both the need for free enterprise and communist infiltration into our industries, using the railroads as an example.

A Review of Railway Operations in 1946, by Julius H. Parmelee. 32 pages. Published by the Bureau of Railway Economics, Association of American Railroads, Transportation Building, Washington 6, D. C. Free.

This is a reprint of the article prepared by Dr. Parmelee for the January 4, Yearly Statistical issue of the *Railway Age*. Year-end figures, which were not available at that time, have been substituted for those appearing in the article. In addition, tables showing capital expenditures of Class I railways for the years 1942-1946 and purchases of fuel, materials and supplies for 1945 and 1946 are included. These tables were published in the *Railway Age* of April 12.

Depreciation Policy and the Postwar Price Level, by George Terborgh. 22 pages. Published by the Machinery and Allied Products Institute, 120 S. LaSalle st., Chicago 3. Price, 25 cents.

This is a study of the effect on depreciation policy of changes in the purchasing power of money. It is designed primarily to state the problem and to explore various ways of dealing with it.

Review of Highway Cost Studies 1932-1946, by Chester K. Smith. 58 pages Available from the Western Association of Railway Executives, 105 W. Adams st., Chicago 3.

Mr. Smith, research engineer for the Western Association of Railway Executives, sets forth in chronological order the various studies that have been made to date and describes the methods of procedure, the factors used in determining highway costs and the formulas that have been utilized to allocate costs between motor vehicle operators and general taxpayers and among motor vehicles of different weights and sizes. He also presents matters upon which agreement has been reached and those upon which agreement has not yet been attained.

Applications of Electricity to Railways, 1946, prepared by Edmund A. Freeman, assisted by Douglas R. Stephenson. 31 pages Published by the Bureau of Railway Economics Library, Association of American Railroads, Transportation Building, Washington 6, D. C. Free.

This bibliography of periodical articles appearing in a select list of periodicals during the calendar year 1946 is divided into three sections—railroad electrification, locomotives and electrical apparatus and equipment. There are 28 foreign and domestic periodicals included in the bibliography, all of which are keyed to indicate in which libraries they are available. An appendix contains lists of books and periodicals contributed by the Signal section and the Communications section of the Association of American Railroads.

Books

Universal Directory of Railway Officials and Railway Year Book, 1947-48, compiled from official sources under the direction of the Editor of the "Railway Gazette." 604 pages. Published by the Directory Publishing Company, Ltd., 33 Tothill st., Westminster, S.W.1, London, England. Price, 20 shillings.

"Nationalization of railways in many parts of the world suggests that the present volume will be of historical as well as current interest, in recording for the last time details of many famous company adminis-

(*Continued on page 97*)

(*Continued from page 94*)

trations in such widely separated countries as Argentina, Colombia, Ecuador, Rhodesia, Spain, Sweden, Switzerland, and possibly Great Britain itself." So states the preface to the 1947-48 edition of this valuable reference book. The first section is devoted to the usual listings of individual railroads throughout the world, together with the names, titles and addresses of their principal officers. Statistics on mileage, equipment and financial results are included, the statistics having been brought up to date for all but a few countries. The second section of the book is devoted to statistics and general railroad information. The table on the world's railway mileage has been brought up to date; new sections on North American railway tunnels and long railway bridges have been added; the tables of the fastest scheduled runs, and the streamline trains in the United States have been revised and the usual helpful tables on the principal gages, principal altitudes on world's railways (with graphs), world's long railway tunnels, the steepest gradients, in addition to many others, are included. Country, general and personal indexes are included.

The Rise and Fall of the Public Utility Concept, by Howard R. Smith. The Journal of Land & Public Utility Economics, May, 1947, pp. 117-131. Published by the University of Wisconsin, Sterling Hall, Madison 6, Wis. Single copies, $1.50.

The author believes that the "public utility" concept—subjecting to regulation a few industries which did not appear to function healthily under complete competitive freedom—is disintegrating, as the courts are permitting similar extensive governmental control to be applied to almost any industry. A corollary to this argument might be that the industries which have looked on complacently while the utilities—e.g., the railroads—were being hobbled by regulation and beset by competition from government-owned facilities may now expect to see how it feels to be subjected to similar treatment.

Fifty-Ninth Annual Report on the Statistics of Railways in the United States for the Year Ended December 31, 1945, prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. 608 pages. Available from the Government Printing Office, Washington 25, D. C. Price $2.25.

Commonly referred to as the "Blue Book," this publication contains a very complete collection of statistics on railways. Included are figures on roadway and track, equipment, traffic, operation, employees, fuel, accidents, revenues, expenses and taxes, income and earned surplus, dividends and interest, balance sheet, investment in road and equipment, capitalization, and receiverships and trusteeships. In addition to these statistics which cover the industry as a whole, there are also detailed statistics on individual carriers. Some statistics are included on the Pullman Company, express companies, electric railways, carriers by water, oil pipe lines, motor carriers, freight forwarders and private car owners.

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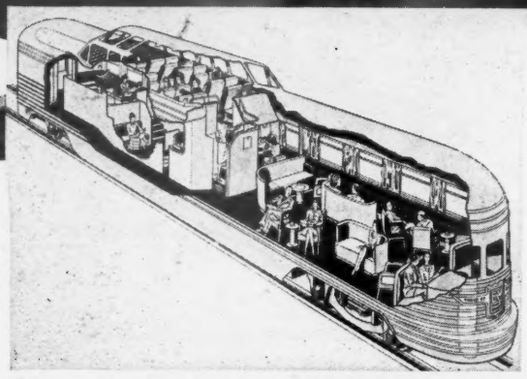

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